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Look to GAS for the smartest ranges of all

If you choose Gas, you can be sure of this: years from now, your new automatic Gas range will still be the last word. Inside and out, it offers you a clean sweep of surface that's both handsome and functional. You get such special Gas advantages as smokeless broiling, instant on-off heat, the evenest baking in the world. And you often get delightful extra surprises. The range shown above, for example, has a special new top burner with the "Governess" that controls the heat inside your cooking vessel automatically. Add the blessings of automatic cooking, automatic timing—and what more could you want in a range? Yet the new automatic Gas ranges cost less to buy, to use and install.

AMERICAN GAS ASSOCIATION

Only **Gas**  gives
such matchless performance



Automatic machine advances on 26-inch section of Texas Gas Transmission pipeline for protective coating and wrapping

MARKET research must go hand-in-hand with technical research if the full potential of sales is to be realized. Utilities, both gas and others, have been slow to use the tools of market research. The A. G. A. Subcommittee on Marketing has summarized these available tools on page 3 and urges gas companies to sell more gas through their intelligent application. . . . Some of the most important of these tools are studies of sales potentials made by A. G. A. Bureau of Statistics. Their latest estimates, on water heaters, clothes dryers and incinerators, are appended to the marketing article. . . . Promotion plays its part in selling gas. An interesting example of an alert tie-in with a project aimed at a national audience is the story of gas at Research Village, that display of modern homes just outside of Chicago. Pictures and story are on page 6. . . . A. G. A.'s own major national promotion, the Mrs. America contest, will be winding up for this year about the time this column appears. But on the local level your own promotions should be just beginning. Your local winner can provide the spark for year round publicity about all domestic gas appliances. How East Ohio Gas capitalized on "Mrs. Ohio" is told by Harold Eckes—see his story on page 20.

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STRAWS in the wind

● *A report in brief
on industry trends and activities*

OUT OF THE LABORATORY INTO THE KITCHEN

A year ago one of the best attended events at the annual A. G. A. Research and Utilization Conference was a showing at the Cleveland Laboratories of experimental developments in gas range design. Demonstrated were the nickel burner, needle point pilots, muffle oven and other ground-breaking advances achieved through laboratory research.

Last month another group of delegates from the Conference again crowded the Laboratories' hall. This year the manufacturers took the spotlight. On view were their own adaptations of Laboratories-developed principles: burners, low Btu pilots and proportioning gas control valves. In addition, the equipment manufacturers showed some of their own advanced designs.

Thus the PAR-sponsored project moved a long step forward

toward its original goal—to bring advanced gas range design out of the laboratory into everybody's kitchens. The progress made by manufacturers in the relatively brief time since all branches of the industry united to retain and reclaim the kitchen load shows that we are on our way to success in this vital program.

As if to underline the fact that this is a continuing program, the Laboratories' staff also showed some projects now underway. Recent PAR research on improved nickel burner modifications, flame target type top burners and a combination oven and broiler equipped with a new luminous flame burner having satisfactory turndown characteristics, were demonstrated.

Gas is best—and we'll make it better!

COMEBACK TRAIL

The story of a great corporation on the comeback trail is scheduled for the June issue of "Fortune" magazine. The company is Servel, Inc., linked throughout its history with the gas utility industry, and the profile will be of its new president, Duncan C. Menzies.

ELEMENTS OF THE SALE

Key to Servel's comeback is recapture of lost ground in gas refrigeration. In a nationwide series of regional meetings, Mr. Menzies preached this gospel to gas utility executives: "Free installation, free service, and financing." These "elements of the sale" must be provided, said Mr. Menzies, if the appliance dealer is to sell gas refrigerators with enthusiasm.

AIR CONDITIONING CHEER

Mr. Menzies brought cheer to gas men with the categorical statement that Servel has licked service problems on its all-year gas air conditioner. His guarantee was couched in terms they understand well: "Our air conditioner is now as trouble-free as an absorption refrigerator."

NEW PERSONNEL

Univac, the electronic brain of Election Day fame, has gone to work for Consolidated Edison Company of New York. Two are assigned to customer accounting, while a rival, IBM 705, handles the payroll.

BUILT-IN STANDARDS

A proposed new standard for domestic gas ranges which differentiates between free standing units and the built-in

type is now in preparation. A draft is being circulated for industry criticism.

A BUYER IN OMAHA

Northern Natural's bid to purchase gas facilities of the municipally owned and operated Metropolitan Utilities District of Omaha, Neb., has been turned over to a 15-man committee for study and recommendations. Omaha's Mayor Rosenblatt formed the committee and asked it to make an impartial and objective investigation of the offer.

HIGH WATTAGE HEATERS

A report for A. G. A. Committee on Comparison of Competitive Services on probable performance of new high wattage electric water heaters is to be prepared by A. G. A. Utilization Bureau. University of Illinois studies on water heating will be used for technical data.

SAFETY AND PR

Charleston Group of Columbia Gas System used its A. G. A. Accident Prevention Award to build public relations. Advertisements showing the award and pictures of presentations were run in 28 newspapers in its territories.

COAL PIPELINE

Now that much of the nation's energy supply is carried through gas and oil pipelines, the coal industry is looking for ways to use the same method of transmission. Pittsburgh Consolidation Coal has plans to build a \$10,000,000 pipeline to carry coal from Cadiz, Ohio, to the northeastern part of the state.

Are YOU selling enough gas?

Prepared by A. G. A.
Subcommittee on Marketing

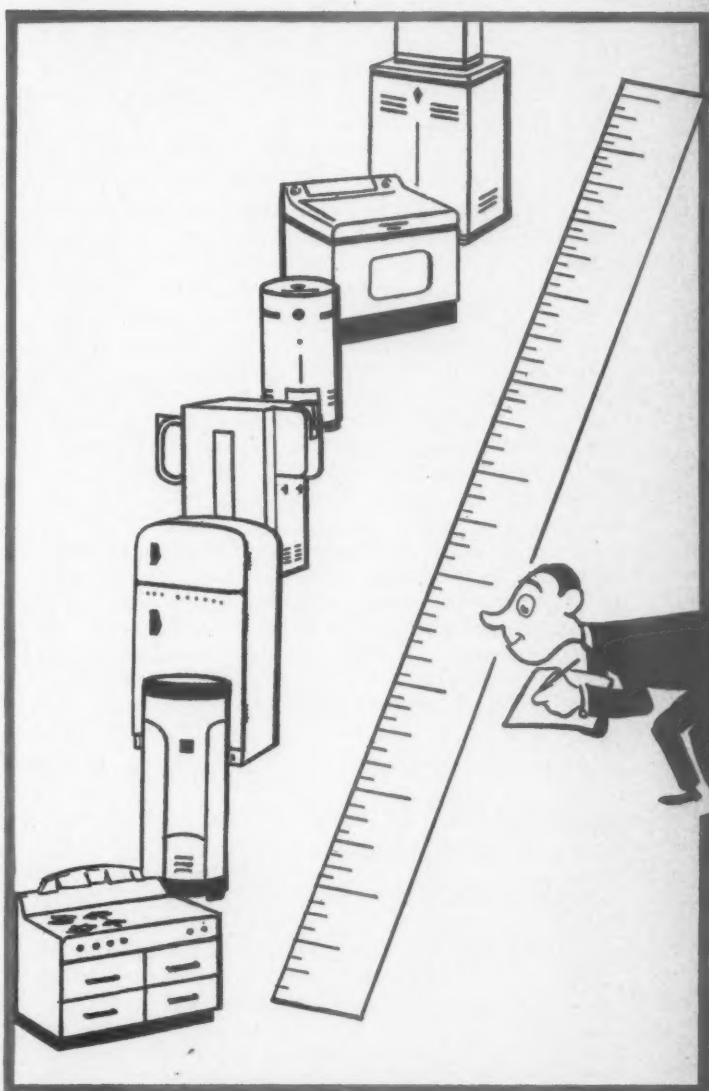
The growth of the American industrial economy, with its simultaneous improvement of living standards and increased productivity, has been well documented during recent years. This growth has depended upon research. Research in the development of new products and new processes has played a vital part in strengthening our economy; research to widen the public acceptance and use of the products of our factories has been a necessary partner of the more widely publicized and glamorous technical research.

The rapid growth of specialized organizations such as the American Marketing Association, and increased attention to marketing research activities by the American Management Association, The National Industrial Conference Board, and similar groups, provide proof of the increased emphasis on facts in marketing by manufacturing organizations.

For many years the gas industry, and all types of public utilities in general, have not emphasized marketing research in their operations. This may have been in part attributed to an impression that, since gas utilities were not competitive in the same way as industrial concerns and were selling a service rather than a tangible product, the need for marketing research was minimized. It is increasingly evident that these impressions are not valid.

Gas competes with electricity for the cooking and water heating market. Coal and oil provide competition in most sections of the country for the heating market, and the threat of the electric heat pump is becoming more imminent. It is true that we sell a service, but this service can only be utilized by the consumer if he has previously purchased an appliance for which the gas may satisfy his needs. Accordingly, all gas utilities have a vital stake in ensuring a high level of sales of satisfactory gas appliances within their service area, regardless of the identity of the seller.

The basic purpose of marketing research is to aid management by providing facts upon which good decisions can be based. A primary area involves assistance to the sales department, other groups within the company, and cooperating dealers to increase the sale of appliances which will use gas satisfactorily. The determination of *how* and *where* more gas



and gas appliances can be sold is the primary subject matter of the gas utility marketing research group. Some of the specific areas within which marketing research operates have already been outlined in the American Gas Association publication "Market Research—Why? What? How?"

A secondary, but important, purpose of marketing research is to provide a means to evaluate objectively the actual performance of the sales department—not necessarily critically but in a constructive and beneficial manner. Some tools used for evaluation may be relatively familiar.

Many companies prepare forecasts of expected sales based upon an extension of historical records and other factors, and then compare these forecasts with actual results. Many companies set quotas, indicating a goal which they expect to reach, and the extent of conformity between actual results and the quota indicates their relative success.

An additional evaluation tool is the gas appliance sales potentials for a local service area. Potentials represent a mathematical computation of the maximum volume of appliances which could be sold within the area under the most favorable circumstances. They will nearly always exceed actual performance since circumstances are rarely if ever ideal and are thus of less value than quotas for contests, salesman bonuses and similar promotional schemes.

Potentials do provide a goal indicating the magnitude of the existing market toward which efforts should be directed. Analysis of differences between the potential and actual results, particularly as potentials are used continuously through the years, will indicate the extent to which company performance is satisfactory and improving.

It should be emphasized that simple comparison of year-to-year appliance sales cannot provide an objective evaluation of company or dealer merchandising success because it fails to recognize that the size of the appliance market may be changing because of general business activity, the level of new housing construction, or many other reasons. Improved sales may be due to external circumstances rather than to your own efforts, and conversely you may be doing a better job than last year even if total sales decline.

Evaluation is only one aspect of the usefulness of appliance potentials; they also provide data to facilitate more effective selling. It is ordinarily necessary in developing potentials to investigate separately the replacement market, the conversion market, and the new housing market. It may sometimes be necessary to distinguish between various income levels or age groups, or between different parts of the company service area,

or between several price groupings of appliances.

In effect, subsidiary potentials are derived for each such category, indicating the relative size of the market for each.

Such data help to point the way toward media selection, relative emphasis upon alternative channels of distribution, and the orientation of promotional programs. Thus, one can determine where the expenditure of a given amount of sales and promotional effort will be most fruitful in terms of subsequent sales of gas.

Appliance potentials are only one alternative use to which various types of data, valuable in everyday assistance to the sales department, may be put. Such data include consumer surveys—interviews to determine buying intentions of your customers, their reasons for these intentions, and an historical record of their past behavior in the purchase of gas and competitive appliances. Some companies may also develop useful historical appliance purchase information by analyzing their sales records or those of cooperating dealers and distributors.

Measurement of consumer intentions provides a floor below which appliance sales are unlikely to fall, but the aggregate of such intentions should never be confused with potential sales. Intentions are only a minimum and may be influenced significantly by gas company efforts; marketing research, advertising and promotion working together can create demands which were previously non-existent. Business forecasting is also pertinent to the development of potentials, since the market may be substantially different under varying economic and business conditions.

For the past several years the American Gas Association has prepared estimates, nationally and regionally, of potential sales of gas appliances. A memorandum has also been developed to point out some basic methods of deriving potentials for *your own service area*, and is available upon request from the A. G. A. Bureau of Statistics. This memorandum must necessarily be a guide, rather than a complete answer, since local circumstances and consumers' characteristics vary considerably. It may nevertheless be useful in guiding the activities of those utilities desiring to use this relatively new and valuable marketing research tool.

● Below is a study of sales potentials for gas water heaters, compiled by the A. G. A. Bureau of Statistics on a national and regional basis. Also shown are estimates of sales potentials on gas clothes dryers and gas incinerators compiled on a national basis. Available from the Bureau are current figures on the sales potentials for househeating equipment.

—Editor

Sales potentials for gas water heaters, clothes dryers and incinerators

By BUREAU OF STATISTICS

American Gas Association

Sales of gas water heaters during 1955 could attain a potential level of 2.85 million units under optimum conditions of product design and sales promotion activities, and a continuation of 1954 levels of economic activity. Potential sales of 16.5 million units are indicated during the five years ending in 1959.

Potentials relate to the maximum sales volume realistically achievable by expending the maximum promotion and product

development effort short of the point where such efforts become uneconomic. If gas water heaters only maintain the current degree of consumer acceptance, and business conditions remain unchanged, sales during 1955 should aggregate 2.35 million units, and a total of 12.8 million units will be sold during the 1955-1959 period.

These estimates, segregated between the four components of the potential market, are summarized below, together with

an historical record of recent actual sales for comparative purposes.

SALES (IN THOUSANDS OF UNITS)

	New Housing	Replacement of Gas Equipment	Replacement of Competitive Equipment	Installation in Existing Housing Without Hot Water	Total
Potentials—					
—1955	825	1,375	325	325	2,850
—1955-1959	3,950	8,850	2,100	1,600	16,500

If no improvements are made in product design and promotional efforts, sales will be—

—1955	750	1,075	275	250	2,350
—1955-1959	3,350	6,700	1,575	1,175	12,800

Actual Sales (est.)—

—1954	2,340
—1953	2,275
—1950-1954	11,250
—1949-1953	10,565

A decline in consumer incomes of ten percent during 1955, and 20 percent during the five years would reduce gas water heater potentials by 15 percent during the first year and by 30 percent during the entire period. On the other hand, a five percent increase in incomes during 1955 and a ten percent advance during the entire period would enlarge the potentials by between five and ten percent.

In last year's study the potential for 1954 was reported as 2.6 million, while sales, assuming no improvement in consumer acceptance, were forecasted at 1.95 million. It is estimated that actual sales during the year amounted to 2.34 million units, indicating substantial success for industry efforts to increase gas water heater sales.

Housing activity an aid

The unexpectedly high level of new housing activity during 1954 undoubtedly contributed to increased water heater sales but this factor would at most account for only 40 percent of the improvement.

The replacement of existing gas water heaters accounts for 55 percent of the total potential market for new equipment, while the new housing market represents an additional 25 percent during the five-year period. The remainder is attributable to the replacement of equipment using competitive fuels, and the installation of gas water heaters in dwellings where no hot water was previously available.

The potential replacement of gas water heaters with new gas-fired equipment is influenced to some extent by the need for more adequate supplies of hot water, occasioned by the large number of new automatic kitchen and laundry devices available to the householder.

The importance of this factor may have been overstated in some instances, according to evidence available from consumer market surveys. A large number of customers reported no significant shortage of hot water in spite of the use of washing machines and dishwashers; apparently many families adapt their habits effectively to existing limitations, or are satisfied in spite of limitations.

In the current study, the national potentials have been subdivided among four areas of the country. The gas water heater potentials for these four areas are shown below.

SALES (IN THOUSANDS OF UNITS)

	1955	1955-1959
Potentials —		
— Northeast	500	2,840
— North Central	830	4,690
— South	940	5,360
— West	580	3,610
Total	2,850	16,500

If no improvements are made in product design and promotional efforts, sales will be —

— Northeast	410	2,200
— North Central	690	3,620
— South	770	4,130
— West	480	2,850
Total	2,350	12,800

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.
North Central: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.
South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia.
West: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

Gas dryers and incinerators

Total potential sales of gas clothes dryers during 1955 are estimated at 300,000 units, and gas incinerator sales could total 140,000 units, if 1954 levels of economic activity continue. Potential sales during the 1955-1959 period are equal to 2.2 million gas clothes dryers and 1.2 million gas incinerators.

Potentials relate to the maximum sales volume realistically achievable by expending the maximum promotion and product development effort, short of the point where such efforts become uneconomic. If consumer acceptance should continue at present levels, and business conditions remain unchanged, sales during 1955 should amount to 250,000 gas clothes dryers and 110,000 gas incinerators. The corresponding totals for the five-year period would be 1.65 million dryers and 0.7 million incinerators.

Sales of gas clothes dryers during 1954 were one-third greater than during the preceding year, with the proportion of total dryer sales represented by gas units showing a significant improvement to over 26 percent. This represents a reversal of a trend during the preceding two years when electric units were capturing increasingly large proportions of the total market.

Slower rate of increase

Although there is no doubt that the proportion of gas dryers to total dryer sales can be improved still further, it is unlikely that this improvement will continue during the next few years at the rapid rate evident in 1954. This factor partially accounts for the relatively modest differential between potential sales and estimates of future dryer sales under present levels of promotional effort.

Since historical statistics on national sales or shipments are very meager for these two appliances, no attempt was made to segregate potential sales by areas of the country, nor to determine impact upon potentials of changed business conditions.

Research Village shows gas uses

The complete family of modern gas appliances plays a key part in "Research Village", built in Barrington, Ill., a Chicago suburb. Top residential architects working with builder team-mates, representing all sections of the country, designed the six homes.

Conceived by the U. S. Gypsum Co., the huge project was developed in cooperation with the American Institute of Architects and the National Association of Home Builders. The gas tie-in was arranged by the National Council for LP-Gas Promotion.

"Our objective is to provide builders of small or medium-sized houses with ideas that increase the livability, comforts, safety and saleability of their houses," said G. J. Morgan, vice-president and assistant to the chairman of the board of directors, U. S. Gypsum Co. "By duplicating in part or in whole these new ideas, builders around the country should gain a strong selling edge in the competitive market that lies ahead."

"Identifying modern gas appliances, LP-Gas and natural gas service with these important new homes does a pace-maker job of establishing our industry as 'the' service for modern homeowners", E. Carl Sorby, chairman of the National Council's public relations committee said in commenting on the big project. "It also provides a first-rate contact with the all-important architect and builder markets and emphasizes the advantages of gas service in 'Suburbia'—where a phenomenal population growth is happening today."

Major stories in black-and-white and color appeared about each of the six

houses in April, 1955, issues of *Better Homes & Gardens*, *American Home*, *House Beautiful*, *House & Garden*, *Living* and *McCall's* magazines. These six consumer publications have readership of 50 million, including "pass-on" circulation.

In addition, *House & Home*, *Progressive Architecture*, *Architectural Record*, *Practical Builder*, *American Builder*, *Arts & Architecture*, *Building Supply News*, *Correlator* and other outstanding trade magazines will carry feature stories.

All of the homes have modern, automatic gas ranges. Three of them will be the glamorous built-in units. All of the homes will have automatic gas clothes dryers and gas-fired central plant heating systems—two hot water and four forced air. Four of the houses will have automatic gas water heaters and two will have gas incinerators and automatic "ice-maker" gas refrigerators.

Northern Illinois Gas Company supplied natural gas for four of the houses. Two houses selected for editorial coverage by *Better Homes & Gardens* and *McCall's* have LP-Gas service for all appliances.

Appliance manufacturers participating in the project include:

Ranges: Caloric Stove Corp., Hardwick Stove Co., Geo. D. Roper Corp., The Tappan Stove Co., Cribben & Sexton Co., and Western-Holly Appliance Company.

Water heaters: The Coleman Co., Inc., FauceHot Heater Co., Ruud Mfg.

(Continued on page 53)



Now are views of three homes built in Chicago
 suburb as part of housing industry's research
 use of modern materials, methods, equipment



Don's top architects and builders used va-
 rious plans to fit homes to site. All six homes
 subject of articles in national magazines



This Research Village kitchen is one
 of three that boasts latest built-in
 gas range. All use gas for cooking



Aiding in gas tie-in were (l. to r.) R.
 E. Borden, LP-Gas Information Serv-
 ice; Marvin Chandler and E. E. Lun-
 gren, Northern Illinois Gas. Behind
 door is Charles Bowen from A. G. A.



Novel installation of washer and gas
 dryer brings laundry into breakfast
 nook. All homes have gas dryers



Southern Natural reward plan pays safety bonus



During monthly safety meeting, a part of outstanding, successful safety program, supervisor demonstrates special extinguisher used in Southern Natural compressor stations

Southern Natural Gas Company's safety program is based on rewards, not retribution. We try to promote safety as a good thing and we have little use for the "Watch out, you'll break your stupid neck" approach.

Our management backs the safety program by authorizing a liberal system of rewards for good safety records. And they speak out for safety at such award events as the banquets given each field unit on the completion of five years without a lost-time accident. If unable to attend in person they may send tape recordings voicing their belief in safe operating practices.

These banquets are really the highlights of the award system and they are done up with a flourish. The finest steaks are accompanied by shrimp cocktails and "all the fixings".

Featured at the banquets is the presentation of a five-year plaque or a handsome ten-year trophy to the unit supervisor by an executive. Plans for a 15-year award are being developed. Speeches at these banquets are short and emphasize the idea that "This is really a record to be proud of. Let's go for five more!" Especially significant, we think, are the impromptu speeches by old timers in the unit, regardless of whether they're on a supervisory level.

Pictures of all the men at the banquet and a story of the event are carried in the next issue of the employee magazine, *The Gasser*.

Each single year of operations without a lost-time accident brings the men of the unit their choice of a 14 to 16-pound ham or a barbecue which is usually held on company time at company expense.

Monthly reports from the safety department list the relative standings of each group and *The Gasser* pours fuel on the conversational fire with a regular feature called "Safety Sweep-Steaks". In this feature the units are grouped in the "Steak", "Barbecue or Ham" and "Hungry" divisions with considerable good natured kidding coming to those in the "Hungry" group.

The back page of the magazine is usually devoted to the misadventures of a cartoon character who ignores basic safety rules with disastrous and ridiculous results. In addition, *The Gasser* uses straight safety news inside with particular praise given people or units developing new and safer techniques or equipment.

To bring the safety awards down to

an even more personal level, each employee who completes a year without a lost-time accident is given a card listing the number of consecutive safe years he's worked.

For those driving company vehicles there's another card listing consecutive no-chargeable-accident years for the individual driver. If one thinks these cards aren't carefully kept he should hear the complaints when a clerical error fails to give a man full credit for his record.

Those are the basic safety awards and we think they are important. But we feel that employee morale in general is equally important in a program aimed at reducing accidents. A variety of very generous employee benefits aid in maintaining this high morale which we feel is reflected in a more receptive attitude towards the safety program.

Another factor in high morale is the readiness of top supervisors and executives to help their subordinates at times of personal stress. Such a little thing as a warm note and flowers from the "big boss" when death strikes a family can be reflected in the morale of the man's entire unit.

In addition to authorizing generous safety awards and voicing its belief in safety as an essential operating policy, management has been liberal in approving expenditures to correct hazards.

Southern Natural's safety program is set up as a staff function under an officer of the company, Robert G. Kenan, who, among other things is in charge of personnel, employee relations, public relations, training and insurance. Mr. Kenan reports directly to the president of the company. In 1942 a full-time safety director was employed.

Our 1941 safety record was so bad we don't even want to quote the figures but it was a big improvement when our new safety director reported a 1942 lost-time accident rate of 19.84 accidents per million man hours. By 1943 we were hitting our stride as the rate dropped to 7.64 and pipeliners of the "old school" began to agree there "was something to this safety stuff after all".

The years since have seen our rate as high as 8.41 in 1947 and as low as 1.92 the following year. But over the years the general trend has been lower. In 1951 Southern Natural won the A. G. A. award for the lowest lost-time accident rate (technically called "frequency") with a rate of 4.62. Our 1953 rate of 2.75 won the A. G. A. award for mem-

ber companies with between 500 and 1,500 employees.

Our 1954 rate was up a bit to 3.28 but we think that looks pretty good alongside the 19.84 after the Safety Department's first year.

Today we have a safety director and two safety engineers, a considerable increase over the lone man with many other duties who was the first safety staff. But then Southern Natural has grown considerably since 1942.

Our safety director, Stanford H.

on the date of each regularly scheduled monthly safety meeting. The meeting is usually called to order by the ranking field supervisor, who also calls for the reading of customary reports, etc., then the meeting is turned over to the safety engineer.

These monthly safety meetings play a vital part in maintaining safe working conditions. The meetings last an hour and are held on company time. After roll call and a reading of the minutes of the previous meeting comes a discussion



Some of tests given to all Southern Natural field and office employees are (upper, l. to r.): chest X-ray, blood specimen; (lower, l. to r.): blood pressure and electrocardiogram

Downey, supervises and promotes the accident prevention program and reports to Mr. Kenan. The safety department maintains records, makes reports, investigates accidents, supervises employee and supervisory training and initiates activities to stimulate and maintain employee interest in the safety program.

The safety director coordinates all safety activities—meetings, committees, inspections, etc. He or a safety engineer visits each system location every month

of any unfinished business. Such unfinished business may consist of a report on steps taken to correct a hazard reported at the previous month's meeting.

Next, each of the four committeemen (who were appointed at the previous meeting by the local supervisor) reads his written report on "Hand Tools", "First Aid and Sanitation", "Safety Equipment" or "Autos and Machinery". Sometimes these reports are perfunctory but often they bring up definite hazards

Another winner— North Shore

By FREDERICK G. HARRIMAN

*Safety Manager
New England Electric System*

When the North Shore Gas Company of Salem, Mass., a member of the New England Electric System's gas division, was awarded the American Gas Association's top award for Accident Prevention in 1954, the company was asked to prepare an article for the "Follow the Leader" series.

This imposes a handicap upon the author since he is writing on a matter that could be incorrectly interpreted as being a "shining example". While Webster's dictionary offers many definitions for the word "leader" we choose to feel that we should not set forth our program as "the leading performer of a group", but that we should act as a "guide" or "conductor".

Years ago the System recognized its responsibility in developing and carrying out an accident prevention program. This awareness stemmed from our responsibility to the employees, to the stockholders and to the general public. Of paramount importance is the safety and welfare of the individual employee.

An active safety program is attempted on his behalf. Since the acceptance of gas by the public, and the dividends of the stockholder, hinge on reliability and safety, management has still another challenge to meet in the development of an effective accident prevention program.

North Shore Gas Company takes an active part in the System's accident prevention program. The manager attends the meetings of the company's safety committee and their recommendations receive his prompt attention. Management delegates much of the authority and responsibility for carrying out the accident prevention program to operating supervisors. These supervisors are assisted by the district safety supervisor working with the North Shore Gas Company and the System safety manager.

These safety men are staff people who keep records, determine progress and trends, make inspections and investigations and give expert guidance and counsel to the operating supervisors.

A number of inspections are made by subcommittees of the company's safety

(Continued on page 52)



New method of artificial respiration is shown by Roy Harris, engineer, at monthly safety meeting. Safety director S. H. Downey (kneeling, in dark shirt), guides the demonstration

or unsafe practices observed. In addition, those not on the committee are encouraged to make suggestions. Some lively and thought provoking discussion frequently follows.

Then the visiting safety man reviews the accidents that occurred over the system since the last meeting and discusses means by which they might have been prevented. Group discussion is strongly encouraged and practical safety ideas frequently arise. The safety man may wind up the meeting with a demonstration or discussion of safe operating techniques.

From the meetings frequently come workable suggestions for improved lighting, ventilation, machine guards and the relocation or isolation of hazards. Many recommendations for changes can be and frequently are put into effect by supervisors on the local level. Sometimes the recommendation or request must go through operating channels for approval.

As a strictly staff unit, the safety department has no authority to order changes or give orders to employees. The department must work through the supervisor. In the final analysis the success of our safety program hinges on the salesmanship of our safety men coupled with the general backing of management.

Except as a part of their over-all responsibilities, safety is not assigned to any of the operating officials.

The safety men, as they make their regular monthly visits to each location, make informal inspections and are alert for any unsafe practices. And as outlined in the account of the monthly safety meetings, a rotating committee from within each group is expected to make a more formal inspection of the premises and current operating practices.

Formal recommendations for engi-

neering revisions usually originate with local supervisors concerned though action on a more general condition or problem may begin at a higher level. The role of the safety man is again that of the "salesman", or consultant.

Safety department recommendations generally govern the purchase of first aid supplies and other safety and fire fighting or prevention equipment. Although no formal channels exist for this purpose, suggestions of the department have in the past sometimes been considered in design and construction of new facilities.

The monthly safety meetings of each unit are the scenes of the more formal portion of our safety training. At a typical meeting the visiting safety man might demonstrate the use and maintenance of fire extinguishers. Less formal but probably equally important is the "conversation" between the safety men and the local supervisors.

Under consideration for future supervisory training courses is material devoted to safety from a supervisor's viewpoint. Training courses actually being planned include instruction for employees of varying levels in the safe operation of automotive and heavy equipment.

All Southern Natural field employees have been given first aid training in the past 18 months. Examinations are to be given and Red Cross cards issued. It's planned to have regular follow-up training by the safety men, all of whom are qualified first aid instructors.

All accidents causing injuries which require outside medical attention are reported in detail by the unit supervisors on the basis of their own investigations.

(Continued on page 51)

Committee acts on 14 standards



Under chairmanship of C. H. Waring (center), A. G. A. Approval Requirements Committee adopts revisions, additions to 14 American Standards

Under sponsorship of the American Gas Association, revisions and additions to 14 current American Standards for gas appliances and accessories have been adopted by the ASA Sectional Committee, Project Z21, A. G. A. Approval Requirements Committee. The committee adopted the revisions and additions at its 65th meeting held March 29 at the American Gas Association Laboratories in Cleveland. These revisions are to be submitted to the American Standards Association, Inc., for approval as American Standard.

The new requirements apply to domestic gas ranges, incinerators, water heaters, room heaters, boilers, furnaces, floor furnaces, vented recessed heaters, unit heaters, duct furnaces, deep fat fryers, gas conversion burners for domestic gas ranges, domestic appliance pressure regulators and metal connectors for gas appliances. They will become effective January 1, 1956, and will be applied to the above types of gas equipment re-

ceived for test by the Laboratories following the effective date. Equipment manufacturers may have tests performed under these new provisions by the Laboratories at any time in advance of the effective date.

The new requirements for domestic ranges incorporate provisions for optional natural gas approval. Appliances so approved will have been tested for use with natural gas and supplemental check tests run with a 1,400 Btu, 1.42 sp. gr. butane-air mixture with no change whatsoever in any natural gas adjustment. These units will be clearly labeled "This appliance approved under optional natural gas requirements" to indicate that other city gas burners and controls may not be available from the manufacturer.

Included in the new domestic gas range requirements of basic importance to the gas industry, were two items given special attention by the Approval Requirements Committee. They cover the automatic ignition of all main burners of

domestic gas ranges and the standardization of valve handle rotation to the "off" position.

Under the new provisions, automatic ignition is required and top section burners may be lighted from a standing pilot only if the burner flames are readily visible. If they are not readily visible, an automatic pilot will be required. An automatic pilot will be required for ovens, broilers, and all other enclosed section burners. The Approval Requirements Committee, however, recognizes that additional time may be necessary to incorporate appropriate designs, thus, this provision is to apply to all approved domestic gas ranges produced after January 1, 1957, regardless of the date of any previous certification.

Since an industry survey overwhelmingly favored clockwise rotation to close for all valves used on domestic gas ranges, the Approval Requirements Committee adopted a specification to that effect. This specification includes the

valve of a combination valve and thermostat assembly, but exempts valves of the "selector type" used to control gas flow to oven and to broiler burners that are located in the same compartment. The provision is to become effective January 1, 1958, and is to apply to all approved gas ranges produced after that date, regardless of any previous approval. This date was selected to allow sufficient time for any needed redesign of present equipment.

In view of the increasing application of horizontal type forced air furnaces for residential heating, additional requirements for the horizontal type have been developed. All horizontal furnaces having input ratings of 150,000 Btu per hour or less, and those units of higher inputs that have been tested for attic installation under the new provisions will be clearly marked "approved for attic installation".

A new basic test load, typifying that of a normal household and calling for 40 percent dry combustibles and 60 percent food refuse, will be used in testing gas incinerators under the provisions to become effective on January 1, 1956. Under these provisions, the density of the gaseous products in the vent system six feet downstream from the appliance flue outlet is not to exceed the equivalent of a No. 1½ Ringelmann for more than eight minutes in any 24-hour period dur-

ing the incineration of the new test load.

A potato-frying test will be performed on all commercial deep fat fryers approved under the new standard for fryers. The energy consumption, during the potato-frying test, is not to exceed 1,475 Btu per pound of raw potatoes.

Comprehensive revisions to the listing requirements for domestic gas appliance pressure regulators were also adopted by the Approval Requirements Committee. Major points include: differentiation between regulators for fixed load application and variable load application; limitation of adjustment of maximum outlet pressure to 6.0 inches water column; regulation at a minimum flow of 0.15 cu. ft. per hour of 0.70 sp gr gas for variable flow types; and the inclusion of some specifications for the first time to examine vent leak limiting devices in combination with appliance pressure regulators.

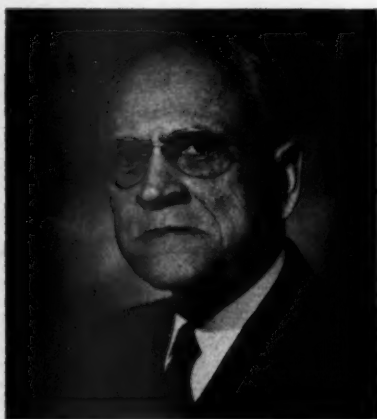
Current requirements for semi-rigid gas appliance tubing and fittings and appliance connectors of flexible metal tubing and fittings were consolidated into one standard by the Approval Requirements Committee. The new standard, upon approval by the American Standards Association, will be known as "American Standard Listing" Requirements for Metal Connectors for Gas Appliances". It covers only assembled connectors comprised of semi-rigid metal

tubing or flexible all metal tubing and having a fitting at each end provided with standard taper pipe threads for connection to a gas appliance and to house piping.

The committee also adopted new performance tests for vented recessed heaters. The provisions are expected to improve the performance of some "border line" designs and tests will be performed under conditions closely simulating proper field installation practices. While the new standards for vented recessed heaters become effective January 1, 1956, the Approval Requirements Committee agreed that all approved vented recessed heaters manufactured following January 1, 1957, were to be approved under the new specifications regardless of the date of any previous approval.

While a number of other new provisions have been included in the standards to become effective January 1, 1956, they are of an editorial nature or clarify the intent or simplify testing procedures while retaining the same end result. The revised standards were recently released by the A. G. A. Laboratories to gas appliance manufacturers and equipment designers for their information. Copies may be obtained from the A. G. A. Laboratories at 1032 East 62nd St., Cleveland 3, Ohio.

K. R. Knapp retires from A. G. A. Laboratories



Kenneth R. Knapp retired from the A. G. A. Laboratories after 44 years of outstanding service to the gas industry on April 30, 1955. He is nationally known for his contributions to the development of the American Standard Installation of Gas Piping and Gas Appliances in Buildings, Z21.30, having served on the committee since its inception in 1925. Prior to this he actively participated in the preparation of safety requirements for gas appliances and accessories.

Immediately following graduation in 1911 from the University of Pennsylvania with a degree in chemical engineering, Mr. Knapp entered the employ of The United Gas Improvement Co., Philadelphia, as a cadet engineer and was connected with the testing and utilization department for 12 years. For the next six years he was engaged in general distribution work for the Philadelphia Gas Works Company.

In 1929 Mr. Knapp joined the staff of

the recently established A. G. A. Laboratories at Cleveland, Ohio, to take charge of a newly organized program of pipe joint research. He directed this project until its successful conclusion.

On January 1, 1931, he was appointed chief engineer of the Laboratories and was placed in charge of all Laboratories research activities. This included not only the pipe joint investigation, but also the mixed gas research program, approval requirements investigations and several gas research problems including an investigation of the characteristics of burning gas with preheated air, burner noise research and a study of combustion space requirements for industrial furnaces.

In October, 1931, he was placed in charge of the Laboratories appliance testing and inspection department. In this capacity he collaborated in the preparation of many technical papers on gas utilization, appliance requirements and

(Continued on page 53)

A comparative cost report based on figures supplied by A.G.A. member utility companies is the industry's most effective new sales weapon

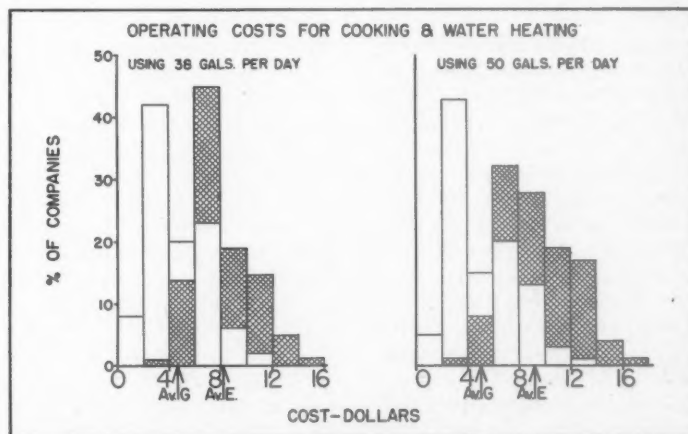
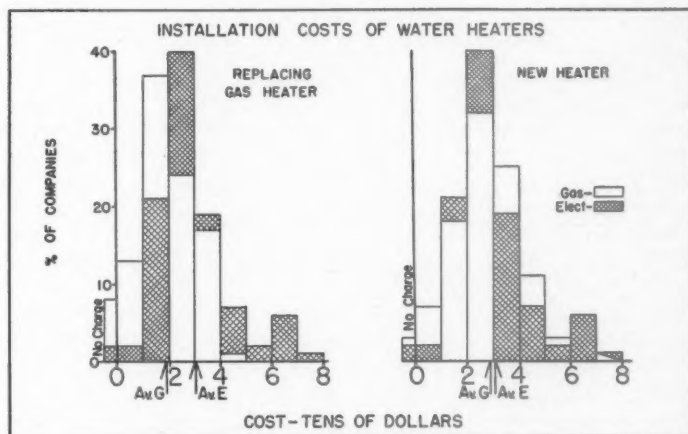
New report proves gas best buy

One of the most comprehensive reports on the subject of equipment cost comparisons has just been released by the American Gas Association. This report*, titled "Comparative Total Costs of Gas and Electricity for Cooking and Water Heating in Residences", is the result of a study sponsored by the A. G. A. Committee on Comparison of Competitive Services.

This new study provides the gas industry with the additional ammunition necessary in presenting a complete sales story. The report gives detailed information on all the phases of cost involved in owning and operating gas and electric domestic ranges and water heaters.

The importance of presenting all sides of the cost picture is recognized by Dr. Earl McCracken of the U. S. Department of Agriculture. In one of the Department's recent releases on food and home notes he states, "A cost comparison should take into account local rates charged for each fuel, and some estimate of the expected amount of use. A more complete cost comparison would go even further and would include initial cost of the appliance and cost of installing it and the fuel system; also likely maintenance outlay."

The A. G. A. report takes all these factors into consideration and also briefly reviews earlier comparative tests which have established the gas to electricity energy equivalents for cooking and water heating as well as demon-



Two charts, based on recently published comparative cost survey that presents the whole picture of gas vs. electric costs, provide powerful sales ammunition

*Available at 40c per copy from the American Gas Association.

strating the superior performance of gas appliances.

In order to obtain the data, all A. G. A. member utility companies were invited to participate in the program. Cost figures for a representative group of cities and communities were supplied by 92 companies serving 61 percent of the total U. S. domestic gas meters. Many of these companies were combination companies supplying both gas and electricity.

Thirteen of the 15 tables included break down the reported costs into a number of price ranges and show the number and percentage of companies in each of the categories. For ready reference, average costs for the various items and conditions of usage are tabulated in a summary table.

Still another table shows the additional cost of using electricity instead of gas for cooking and water heating in 71 typical cities. These cities are listed by name and the table can, therefore, be used very effectively to illustrate the cost advantages of gas equipment in practically all sections of the country. The list is very representative, since it covers both large cities and small communities.

Pertinent information concerning the four items of cost covered in the report follows:

Operating Cost: Field and laboratory studies previously conducted under the supervision of the Committee on Comparison of Competitive Services of the A. G. A. established the gas to electricity equivalents for cooking used in this study. These same equivalents were confirmed by a recent laboratory study carried out by the Agricultural Research Service of the U. S. Department of Agriculture under a cooperative agreement with the National Electrical Manufacturers Association. The equivalents for water heating are those obtained by the University of Illinois' series of tests.

The average monthly cooking cost with gas was found to be \$1.88. Electric cooking, on the average, cost 1.5 times as much and amounted to \$2.90. Except in a few areas where public power sources permitted unusually low electric rates, gas cooking was always less expensive than electric cooking. On the other hand, in areas where low cost natural gas is available, electric cooking costs were eight to nine times higher than gas.

Water heating costs were computed for three different conditions of use—38 gallons, 50 gallons, and 100 gallons per day. The use of electricity practically doubled the monthly expenses, since it

cost 1.9, 2.0, and 2.3 times as much as gas for the three daily usages studied.

The combined cooking and water heating costs were also calculated and the accompanying chart presents a graphic illustration of the results for cooking plus 38 and 50 gallon per day usage.

Equipment Cost: Each company reported the initial cost (exclusive of installation) of those particular models of gas ranges which were considered to be most popular in the given territory, and the price of the most nearly comparable electric ranges.

The equipment costs for water heaters are based on the sizes of water heaters shown by the University of Illinois tests to have comparable performance. Cost data is shown for gas and electric water heaters with galvanized tanks and with glass lined tanks.

Installation Cost: The gas installation costs are shown in two different ways: First, the costs which result when a gas range or a gas water heater replaces existing appliances of the same type, and second when considering the installation cost for the appliances in a new house.

Electric equipment installation costs are also shown in two ways: First, where an electric range or an electric water

(Continued on page 52)

A.G.A. annual convention draws satellite meetings

Satellite meetings clustered about the big star. That's how Southern California's agenda of gas meetings shapes up this fall when industry specialists the country over head toward Los Angeles and the American Gas Association-Pacific Coast Gas Association Convention, October 17, 18 and 19.

The satellites in this case are a growing number of gas meetings scheduled in conjunction with the A. G. A.-PCGA conclave. Most of these groups will meet in nearby communities to consider topics of special interest to their members and then converge on Los Angeles.

These additional meetings, plus Southern California's famed weather and scenic attractions, are expected to push A. G. A. registration well past the 3,000 mark. Room reservations for over 1,600 participants already have been assigned by the A. G. A. Housing Committee.

In joining the American Gas Association for this convention, the Pacific Coast Gas Association has telescoped its annual three-day meeting down to a lunch-

eon program on October 19. Some 1,100 participants are expected at the Biltmore Hotel for this meeting which also will serve as the closing A. G. A. session.

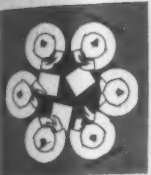
In addition to the popular Home Service Breakfast at the Ambassador the morning of October 18, home service directors in the two Los Angeles gas companies have agreed to play host to the Home Service Round-Table, Tuesday afternoon, October 18, in the newly decorated and beautiful home service department of the Southern California Gas Company on Flower Street. Completely modern in style, the department includes an auditorium, a demonstration center, three test kitchens, and department offices.

Organizations which already have scheduled October meetings in the Los Angeles area include the board of directors, Gas Appliance Manufacturers Association, October 11 at El Mirador Hotel, Palm Springs, followed on October 12-14 by Annual GAMA Convention.

Several other important groups and committees are finalizing meeting dates and locations on a schedule convenient for participants to attend the A. G. A. Convention.

On October 20, the day following the close of the A. G. A. Convention, the Managing Committee of the Accounting Section will hold its semi-annual meeting at the Hotel Statler. This committee is comprised of outstanding accounting executives of member companies of the Association and is responsible for the activities of the Accounting Section.

Members who have not secured their convention hotel reservations are urged to do so. Forms can be secured from A. G. A. Headquarters, 420 Lexington Avenue, New York 17, N. Y. Requests for reservations should be sent to the A. G. A. Housing Committee, Convention Bureau, Los Angeles Chamber of Commerce, 1151 South Broadway, Los Angeles 15, California.



Industrial relations round-table

Prepared by
A. G. A. Personnel Committee

Edited by W. T. Simmons
Assistant to the Personnel Manager
Philadelphia Electric Company

● **Recruiting engineers from the military "reserve"**—If you're faced with the problem of doing some recruiting of engineering and scientific graduates, here is a new source. Many military bases, where there is a concentration of scientific manpower among draftees, maintain unofficial placement agencies for men about to be "graduated" from service. They offer recruiting facilities comparable to those of college placement bureaus.

Called Scientific and Professional Personnel in army jargon, contact with these S & P placement offices can be made through the post commander at such stations as: Ordnance Center, Aberdeen Proving Grounds, Md.; Army Chemical Center, Edgewood, Md.; Signal School, Fort Monmouth, N. J.; Dugway Proving Grounds, Utah; Engineer Center, Fort Belvoir, Va.; and Transportation Center, Fort Eustis, Virginia.

Looks like a good chance to tap a source of hard-to-find men, many of whom have had previous industrial experience.

● **Chamber of Commerce sees unions controlling government by control of jobs**—The Chamber of Commerce of the United States takes to task those "inclined to shrug off the union shop issue as a matter which doesn't concern them".

Asserting that union spokesmen have told the Supreme Court that the union shop is indispensable and that union membership must be a condition of employment, an editorial in a recent issue of the Chamber's *Washington Report* says:

"Attainment of this goal would mean union control of all the jobs in all important industries. This nation-wide labor monopoly would place in the hands of labor leaders an irresistible concentration of power. They would dominate industry. Eventually, they would dominate the government through their control of union members."

The Chamber says fear of "a union government tyranny may seem alarmist until you recall the full extent of present union power. Today labor leaders control most of the opportunities for employment of a high proportion of workers. They have demonstrated their power in such terrifying actions as strikes when America was engaged in a war for survival against foreign enemies". And in England, the Chamber says, "we witnessed the actual transformation of a private labor government into a public Socialist government". It holds that seizure of political

power by union leaders "would be inevitable" once they had established a monopoly for jobs, since "such action would be necessary for the protection of the monopoly against the resentment it would create".

The editorial concludes that "voluntarism" in unions would better serve everyone than union insistence on union-shop conditions. It says: "No group of business managers has ever dared assert they had a 'right' to monopolize all opportunities of employment. But labor leaders boldly claim it is not only their aim but their 'right' to close all doors of employment except the union door. There can be no justification of a 'right' which would rob the workers of all his rights."

"No worker could oppose the union leader who has the power to refuse him a job wherever he turns. It is absurd to contend that workers can control their leader when their resignation from a union would mean the loss of their livelihood. Only if union membership is voluntary will labor leaders be responsible to union members. Fear of loss of membership would make union leaders the servants of both the majority and minority. Voluntarism would not destroy unions. On the contrary, it would strengthen them as representatives of the workers. Perversion of power for personal ends would be checked. The resentment and hatred which compulsion create would disappear. Men working voluntarily together for their mutual good have ever been stronger than slaves."

"As far back as 1910, Supreme Court Justice Brandeis, an outstanding supporter of labor, wrote: 'The objections, legal, economic, and social, against the closed shop are so strong, and the idea of the closed shop so antagonistic to the American spirit, that the insistence upon it has been a serious obstacle to union progress.'"

● **New work clothes—Worklon, Inc.** (253 West 28th St., New York) are making new grey work clothes which are just the thing for workers who come in contact with acids or caustics. That's because they're made of Dynel, one of the miracle fibers. They cost lots more than cotton, slightly more than wool, but outlast both.

● **NLRB Rulings—Union activity on company premises**—Recently the National Labor Relations Board made a ruling which affects union conversations during working hours. The Delta Finishing Co., at the same time that a union was beginning its organizing campaign, issued and began to enforce a company rule banning union discussions during working hours. Discussions and talk about other matters not directly associated with the employer's business was permitted during working hours. The company also

issued and enforced company rules against union solicitation and the distribution of union literature during non-working hours.

The Board's ruling stated that the employer had unlawfully interfered with the employee's rights by issuing and enforcing the rules for union discussions during working hours. Since non-union subjects were permitted to be discussed during working hours, the Board thought this was a discrimination against the union.

In the same ruling, NLRB states that to prohibit the employee from engaging in union solicitation and discussion on company property during non-working hours unreasonably impedes employee's rights to self-organization.

Confidential employees excluded from bargaining unit—The National Labor Relations Board has ruled that clerk-stenographers and clerk-typists, who regularly substitute for secretaries to management personnel, who formulate or effectuate general labor relations policies, or who customarily have access to data regarding expected changes which may occur as a result of contractual negotiations, are considered confidential employees who should be excluded from the bargaining unit. (See *Potomac Electric Power Co. and IBEW, AFL*; Case No. 5-RC-1473; February 9, 1955.)

Board adds chapter on severance votes in gas and electric companies—The Labor Board makes it plain it does not want to disturb the long-standing principle that plant-wide bargaining units are most appropriate for public utilities. Although the Board's new doctrine for severance of craft and departmental units from broader bargaining groups might suggest that unions can bid for elections among separate employee classifications at gas, electric and water companies, the NLRB says the newer policy does not override the older principle applied to utilities.

Hence, the Board dismisses election petitions of AFL's Teamsters and CIO's Utility Workers aimed at carving out two employee groups at the Public Service Company of Indiana where AFL's International Brotherhood of Electrical Workers is the representative of a broad bargaining unit.

The unions had placed reliance on reference made by the Board to the old National Tube doctrine when it changed craft and departmental rules in the 1954 American Potash case. The Board said it would not extend the National Tube doctrine that severance elections cannot be held in certain basic industries where there is a broad bargaining unit. This reliance was misplaced, the Board says, because the principle applied to utilities is something aside from the National Tube doctrine.

Two-sided rule violation doesn't make for balance—When both an employer and a union
(Continued on page 53)

L. R. Nuhfer, The Peoples Natural Gas Co., discusses safety with E. H. Eacker, Boston Consolidated Gas Co., speaker at Accident Prevention Luncheon held during conference



Industry leaders at luncheon conference are (l. to r.): F. M. Banks, president of A. G. A. and Southern California Gas Co., who spoke on management development; Larry Shomaker, vice-president, Northern Natural Gas Co., chairman of the section, and Howard B. Noyes, senior vice-president, Washington Gas Light Co., who presided at luncheon

Dr. J. R. Dunning, Columbia University, speaker on atomic energy, displays \$9,000 block of uranium to J. H. Carson, East Ohio Gas Co., Cleveland



*Cincinnati meeting:
clearinghouse for successful utility
management principles*

Better management is conference keynote

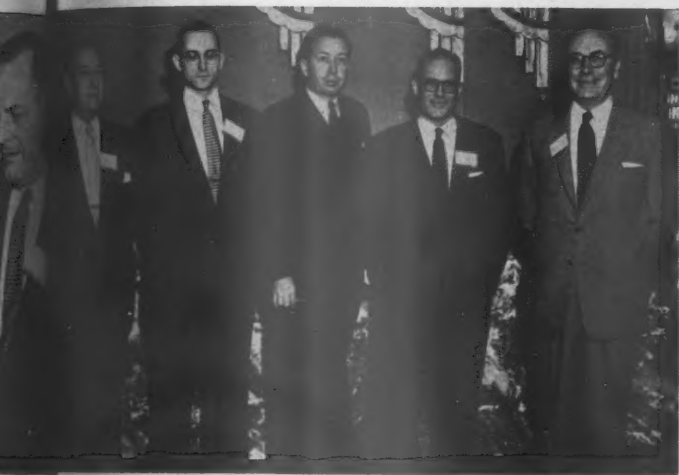
Although management development constituted the major theme, it was by no means the only topic of discussion at the Spring Conference of the General Management Section of the American Gas Association at Cincinnati, March 21-23.

Seven committees comprise the A. G. A. General Management Section and each participated actively in the Conference. From the opening address by Larry Shomaker, Northern Natural Gas Co., Section chairman, to the final question answered by Dr. John R. Dunning, Columbia University, in the atomic energy meeting, every effort was made to bring information to the 300 delegates and guests in attendance.

W. H. Zimmer, The Cincinnati Gas and Electric Co., welcomed the conference to Cincinnati after Chairman Shomaker outlined the purposes of the meetings. Dr. Charles F. Roos, The Econometric Institute, Inc., offered his views of the outlook for general industrial activity and its implications for the natural gas industry. He predicted rises in sales of



W. B. Tippy, Commonwealth Services Inc., briefs speakers (l. to r.): W. A. Paton, University of Michigan, C. F. Roos, Econometric Institute, W. H. Zimmer, Cincinnati Gas and Electric Company



Discussion leaders are (l. to r., seated): G. A. Morgan, The Peoples Gas Light & Coke Co., Chicago; W. J. Herrman, Southern California Gas Co., Los Angeles and J. R. Gardner, Central Hudson Gas & Electric Corp., Poughkeepsie. Standing, G. Griswold, Brooklyn Union Gas Co., and R. F. Hoyer, Stone & Webster Corp., N. Y.

Management Development Panel includes (l. to r.): Don Beecher, Dr. Philip Ash, F. H. Kirkpatrick, Dean Richard Donham and Leslie Brandt

both non-durable and durable goods for consumers. This would include gains in household appliances such as gas ranges, clothes dryers and air conditioning equipment. Natural gas should reach another peak in 1955 and the outlook for the next decade is one of continued growth, Dr. Roos forecast.

Dr. Paton, University of Michigan, spoke on the vital need for competition in our society. A sure road to government monopoly would be to let competition degenerate. Competition need not be cut-throat rivalry, he said.

He defined competition as a way of creating a better product, through better methods and lower costs or improved selling to attract consumer business. The utilities are a big part of the national economy, and since competition is indispensable in a free enterprise economy, the utilities must foster it as a bulwark against state socialism.

Howard B. Noyes, senior vice-president, Washington Gas Light Co., presided at a "Get Acquainted" luncheon Monday noon. At this meeting F. M.

Banks, president of A. G. A. and president, Southern California Gas Co., expressed his views on management development.

Looking ahead to see what kind of managerial jobs will need to be filled is an important approach to this problem. Development in management people of the ability to appraise their subordinates is another important feature in any program. Mr. Banks stated that development, to be effective, must largely be self-development; people must learn to assume responsibility.

He pointed out some of the drawbacks in "management trainee" courses. University programs of management development make real contributions in broadening horizons and casting new light upon the job to be done, but the long run basic job lies with management itself.

The afternoon on Monday was devoted to committee meetings and panel sessions by individual committees comprising the sections. Gene Miller, National Safety Council, told the Accident Prevention Committee of the new stand-

ards for measuring and recording work injury experience. Leo Nuhfer, The Peoples Natural Gas Company, Pittsburgh, presided as chairman of the committee.

John R. Gardner, Central Hudson Gas & Electric Corp., and George A. Morgan, The Peoples Gas Light & Coke Co., presided at meetings of their respective committees, Comparison of Competitive Services and Rates. Gordon C. Griswold, The Brooklyn Union Gas Company, led a meeting of the Committee on Economics.

Tom H. Wheat, Transcontinental Gas Pipe Line Corp., headed a Corporate Secretaries Committee meeting, at which George K. McKenzie, president, The Flintkote Co., and current president, American Society of Corporate Secretaries, discussed the Securities and Exchange Commission and corporate secretarial work.

John Childs, vice-president, Irving Trust Co., headed a panel which discussed points financial analysts would like to see in company annual and financial reports.



Leo Nuhfer (standing) presides at Accident Prevention Forum. Panelists are, (l. to r.): J. P. Mulvihill, C. W. Provonchee, R. L. Groves and Stanley Owens



Purchasing and Stores meeting speakers (l. to r.): R. I. Highgate, chairman, C. H. zur Nieden, J. F. Quigley, E. F. Rogers, V. C. Parkes and B. H. Firestone



Speakers at General Management Insurance Luncheon are (l. to r.): R. C. Brandow and R. T. Sprague, both of New York and R. S. Gillespie of Philadelphia



E. I. Bjork (left) The Peoples Gas Light & Coke Co., spoke on management salaries at personnel meeting. E. L. Ramsey (right) Laclede Gas Co., presided

The Insurance Committee, headed by Robert D. Sprague, Cities Service Petroleum, Inc., conducted a meeting largely devoted to phases of health insurance and group insurance. Donald D. Cody, New York Life Insurance Co., pointed out some of the shortcomings in existing patterns of insurance planning. Inflation in basic costs of medical care and changes in medical techniques have lifted costs of group insurance programs. Many programs should be overhauled in the light of these shortcomings, he declared. A general discussion on health insurance was led by R. D. Constable, Niagara Mohawk Power Company, Syracuse, New York.

E. I. Bjork, president, The Peoples Gas Light and Coke Co., Chicago, addressed a meeting of the Personnel Committee on management salary administration. The Purchasing and Stores Committee conducted a business meeting

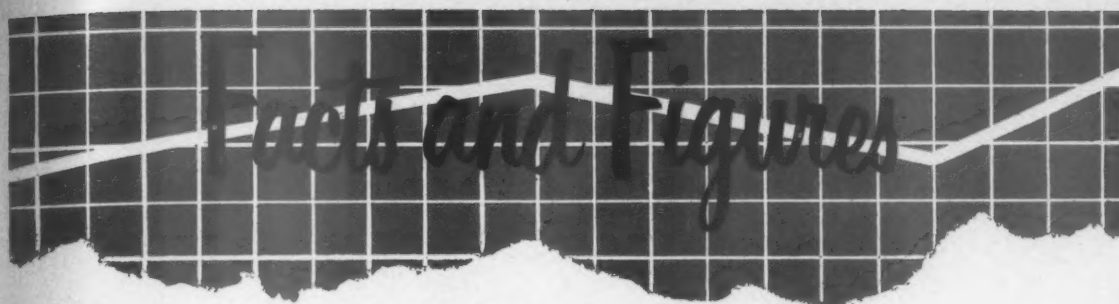
with Robert I. Highgate, Memphis Light, Gas and Water Division, presiding. Hale A. Clark, Michigan Consolidated Gas Co., spoke on market research as a guide to management at a joint meeting headed by Gordon C. Griswold, Brooklyn Union Gas Company.

Leslie A. Brandt, vice-president, The Peoples Gas Light and Coke Co., presided at a general session Tuesday morning, devoted to management development from the company standpoint. Divergent methods of selecting and advancing personnel for management jobs were offered by a panel headed by Dean Richard Donham, Northwestern University. Panel members were Don Beecher, Equitable Gas Co., Philip Ash, Inland Steel Co., and F. H. Kirkpatrick, Wheeling Steel Company. Trainee schools, university management courses and other methods of advancing personnel were subjects of interested discussion.

E. H. Eacker, president, Boston Consolidated Gas Co., and past-president, A. G. A., addressed an Accident Prevention Committee luncheon on Tuesday noon. He spoke of the part industry and its employees take in the big picture of our national and international economy. Production is essential for prosperity as well as for defense. Accidents are wasteful not only of human resources but also in production, he said. Management must take proper steps to insure against waste in any segment of our economy, especially in loss of manpower through disabling accidents.

At a joint luncheon meeting, with Mr. Wheat presiding, delegates learned of the role insurance companies play in financing public utilities. Homer A. Severne, vice-president, John Hancock Life Insurance Company, pointed out that at the end of 1954, the life insur-

(Continued on page 54)



Prepared by A. G. A. Bureau of Statistics

ESTIMATED GAS industry construction expenditures in the second quarter of 1955 are expected to reach a record \$383 million, 21.6 percent greater than expenditures in the comparable quarter of last year. Total gas utility and pipeline industry construction expenditures are estimated at \$1.4 billion during 1955, making this year the second best in history. A summary of industry construction expenditures, by quarters, for the past three years is shown in an accompanying table. These data are based on SEC tabulations, and we expect to develop comparable statistics regularly in the future.

These construction expenditures are being made in an effort to satisfy consumer demands for gas. The extension of service to new gas utility customers continues at a rapid pace. Over 800,000 additional customers were initially served with this fuel during 1954. Indications point to continued customer growth at a comparable rate.

New housing starts during February were 99 thousand units, up 31.6 percent over last year. Estimates of new home construction during 1955 indicate a total of 1.3 million new homes.

The effect of the present boom in home-building on the sales of gas appliances is evident from the record shipments of such appliances during February. Gas range shipments of 193,900 units were 26.8 percent higher than a year ago. January shipments of 155,100 units, although up 13.2 percent were nevertheless slightly below electric range shipments of 156,200 units, apparently the first time that this relationship has occurred.

Shipments of gas water heaters during February aggregated 218,500 units up 24.9 percent over a year ago. Shipments of 46,100 gas fired furnaces, up 45.9 percent, represent a continuation of the substantial gains of earlier months. There were 5,700 gas conversion burners shipped during the month, 34.5 percent lower than a year ago.

As has been previously indicated, the market for conversion equipment, as a replacement for competitive fuels, is constantly diminishing. This reflects the fact that so many non-gas units have already been converted to gas and that the number of homes still eligible for such installations has declined significantly.

Shipments of 28,500 automatic gas dryers and 80,700 electric dryers during February were 83.7 and 71.8 percent higher, respectively, than shipments in February, 1954.

Gas appliance data relate to manufacturers' shipments by the entire industry compiled by the Gas Appliance Manufacturers Association.

(Continued on page 57)

SALES OF GAS AND ELECTRIC RESIDENTIAL APPLIANCES DURING FEBRUARY, 1955

(WITH PERCENT CHANGES FROM THE CORRESPONDING PERIOD OF THE PRIOR YEAR)

	February		January	
	Units	Percent Changes	Units	Percent Changes
RANGES				
Gas	193,900	+26.8	155,100	+13.2
Electric	n.a.	n.a.	156,200	+34.2
WATER HEATERS				
Gas	218,500	+24.9	200,000	+21.7
Electric	n.a.	n.a.	62,400	+15.8
GAS HEATING				
Furnaces	46,100	+45.9	46,800	+51.0
Boilers	3,600	n.a.	3,700	n.a.
Conversion Burners	5,700	-34.5	5,200	-40.9
DRYERS				
Gas	28,500	+83.7	22,900	+5.6
Electric	80,700	+71.8	92,500	+52.9

n.a. Not available.

PERTINENT BUSINESS INDICATORS, JANUARY AND FEBRUARY, 1955

(WITH PERCENT CHANGES FROM THE CORRESPONDING PERIOD OF THE PRIOR YEAR)

	February		Percent Change	January		Percent Change
	1955	1954		1955	1954	
Industrial activity (1947-49 = 100)	133	125	+ 6.4	131	125	+ 4.8
Consumer prices (1947-49 = 100)	114.3	115.0	- 0.6	114.3	115.2	- 0.8
Housing starts, Non-farm (thousands)	99.0	75.2	+31.6	88.0	66.4	+32.5
New private construction expenditures (\$ Million)	1,986	1,637	+21.3	2,061r	1,710	+20.5
Construction costs (1947-49 = 100)	142.5	135.5	+ 5.2	142.4r	135.7	+ 4.9

r revised.

GAS SALES TO ULTIMATE CONSUMERS BY UTILITIES AND PIPELINES DURING FEBRUARY

(MILLIONS OF THERMS)

	1955	1954	Percent Change
FEBRUARY			
All types of gas	7,591.0	6,184.9	+22.7
Natural Gas	7,174.2	5,791.5	+23.9
Other gases	416.8	393.4	+ 5.9
TWELVE MONTHS ENDING FEBRUARY 28			
All types of gas	62,569.0	57,468.3	+ 8.9
Natural Gas	59,206.5	54,226.4	+ 9.2
Other gases	3,362.5	3,241.9	+ 3.7

Index of Total Gas Utility Sales (1947-1949 = 100) 216.9

(More tables appear on page 57)

● *Your local Mrs. America promotion can yield year around benefit*



(Above) Mrs. Juanita Kerestesz, winner last year of "Mrs. Ohio" title, aided by her lovely daughter, helps sign up entrants for 1955 contest



(Right) Acceptance of publicity shots such as the picture of glamorous new built-ins is heightened when Mrs. Ohio appears as model

Mrs. Ohio sells gas all year

By HAROLD ECKES

*Director, Public Relations &
Market Research
The East Ohio Gas Company
Cleveland, Ohio*

Gas utility sales promotions, as a rule, are designed to turn the spotlight for a limited time on the merits of one particular gas appliance. All mass media are pressed into service—newspapers, television, radio. Duration of the effort can range anywhere from six weeks to six months.

When the campaign is over, sales figures are compared with the promotion effort and a judgment rendered. It either succeeded or fell flat on its face. Then the advertising men switch their talents

to mapping strategy for the next campaign.

While this is all well and good, The East Ohio Gas Company of Cleveland believes it has hit upon a sales promotion that not only has "push" for a prescribed period of time but offers tremendous publicity value throughout the entire year.

It is the "Mrs. America" contest.

This year, East Ohio's local contribution to the Mrs. America contest—selection of Mrs. Ohio—was kicked off on February 1. Following the initial announcement an avalanche of application requests poured into the utility's offices from interested homemakers of all ages and from every social station.

Because the promotion was of high news value newspapers throughout East Ohio's territory gave Mrs. America news

benefit. Here's how East Ohio Gas capitalized on last year's contest winner



(Above) Manufacturers welcome Mrs. Ohio's appearance at their exhibits. Here she visits Republic Steel's kitchen display at Home Show

(Left) No need to restrict publicity efforts to one gas appliance when local contest winner is used—the whole line can be promoted

releases top priority, often carrying them on page one. Lake Shore Gas Company and Ohio Fuel Gas Co., other state sponsors of the contest, reported similar press enthusiasm.

And the more newspaper stories which appeared, the more requests for application blanks came in. Highlight of the campaign, publicitywise, was the announcement by the *Cleveland Press*, a daily read by more than 300,000 Greater Cleveland families, that it would co-sponsor the contest in its circulation area.

Shortly after the *Press*' entry into the contest, Halle's department store announced it would outfit Mrs. Ohio for her trip to Ellinor Village, Florida, site of the national judging. Whirlpool followed up by agreeing to give the state winner a gas clothes dryer, and a host of

smaller prizes were lined up for not only Mrs. Ohio but for district winners as well.

Current Mrs. Ohio, Juanita Kerestes, played an important part in the promotion. She made herself available for press, radio and television interviews and particularly distinguished herself at the all-gas model home at the Stark County Home Show in Canton. She was guest of honor at a special mayor-press party preceding the show and at the opening ceremonies posed for pictures with each sponsor present.

In advance of the actual contest, Mrs. Ohio volunteered her services as hostess and judge's aid at the *Cleveland News* Home Baking Contest in Cleveland, and a few months later appeared as a special guest at the Cleveland Home and Flower Show in the *Cleveland Press* booth.

That's all well and good, but you may ask how can Mrs. Ohio aid her sponsoring utility when the contest is over and the lull before the next contest sets in?

East Ohio's state winner was not only a charming and personable young homemaker but an attractive one as well, so the utility requested her services as a model for appliance publicity pictures. Her name in the photo caption sold many pictures which otherwise might have been rejected, the company believes.

The pictures not only promoted gas appliances but they gave the story a news angle that most appliance publicity photos lack because Mrs. Ohio, a young, Cleveland homemaker, was posed with a range, water heater, incinerator or clothes dryer . . . "and she loved it be-

(Continued on page 22)

Choose seven judges for Mrs. America contest



Judge Isabel McGovern directs New York Herald-Tribune kitchen



Editor Iris Davenport also heads home economists' group



Mary Rokahr is member of University of Connecticut faculty

Seven judges will pool their professional talents to pick Mrs. America of 1956 out of the 49 finalists who gather at Ellinor Village, Fla., for the contest finals during the week of May 9-14.

Starring on the judges' panel are three well-known home economists: Isabel McGovern of the New York *Herald-Tribune*, Iris Davenport of *Farm and Ranch* magazine, and Mary Rokahr of the University of Connecticut's School of Home Economics.

Miss McGovern, former home service director of the Minneapolis Gas Co., is director of the *Herald-Tribune* kitchen and a special food writer. She has been food and appliance supervisor of the Betty Crocker department of General Mills, and a home economist with Lever Brothers. For the past 15 years, she has been writing a monthly food column for *Our Special*, a Braille magazine for blind women all over the world.

The second home economist, Miss Davenport, is editor of the woman's department of *Farm and Ranch* magazine, published in Nashville, Tennessee. She also holds the position of chairman of the Home Economics in Business group.

Miss Rokahr, an associate professor, is head of the Department of Home Management of the School of Home Economics at the University of Connecticut, located at Storrs, Connecticut. Before joining the university staff she was a

home economist with the Extension Service. She is widely known as an authority in motion study and work simplification as applied to homemaking. During her extension service days she was a county home demonstration agent in Nebraska and state home demonstration leader in Wyoming for a number of years.

Other national judges are Johnny and Penny Olsen, husband and wife team of radio and television with programs on NBC, DuMont and other networks; Russell Patterson, artist, illustrator, designer and interior decorator; and Arthur William Brown, who has been an illustrator for half a century and is now the honorary president of the Society of Illustrators.

Mr. Brown's work has appeared in all the leading magazines, mainly *Saturday Evening Post*, *Ladies Home Journal*, and *Redbook*. Among the authors whose work he has illustrated are O. Henry, Booth Tarkington, F. Scott Fitzgerald, Ring Lardner, and Irvin Cobb. He is the pictorial creator of "Mr. Tutt" in the Arthur Train stories that ran for years in the *Post*, and also illustrated all the Rose Franken "Claudia" stories in *Redbook*.

He has been a judge at Miss America, Miss Canada, Miss Ireland, and many other contests, but feels that the Mrs. America contest is the most constructive in every way and is a great help to the young American housewife.

Mrs. Ohio sells gas

(Continued from page 21)

cause it was just like the one installed in her home".

In the spring and summer when builders hold open house for a new "all-gas"

development, Mrs. Ohio makes an excellent and attractive hostess because people believe what she tells them about an appliance. And why shouldn't they? She's a typical homemaker; she uses and likes gas and talks the language of the average wife and mother.

Her pitch is honest and convincing.

Mrs. Ohio or Mrs. Pennsylvania can be a year-round promotion implement; her use to the gas utility needn't end when the state contest does.

"Proof of the Pudding" is that Mrs. Ohio has paid off for East Ohio.

Pacific Northwest gas executives plan for natural gas

GAS DISTRIBUTING company executives from the State of Washington, Oregon and British Columbia recently discussed a five-year, \$70,000,000 spending spree. The money and time will be used to convert the systems of seven companies in the area to natural gas.

The 34 executives met to honor Seattle Gas Company's new president, Walter S. Byrne, who will manage the \$13,500,000 expansion program in his company's territory. Mr. Byrne was formerly general manager of the Metropolitan Utilities District, Omaha, where he directed domestic conversion to natural gas.

Allen Peyser, president of Washington Gas

& Electric Co., who is discussing merger possibilities with Seattle Gas, said his company plans to invest about \$6,000,000 for expansion. G. H. Gueffroy, president of Portland Gas & Coke, which serves Willamette Valley and other western Oregon cities as well as Portland, said his company expects to spend about \$16,067,000.

British Columbia Electric will spend an estimated \$17,975,464 for conversion, installation of new distributing systems in a number of Fraser River valley communities, and for a lateral from Vancouver, B.C. to connect with Westcoast Transmission, Ltd. line at Hunting-

don. Stewart Matthews, president of Cascade Natural Gas Co., said about \$11,000,000 will be spent to serve 19 Northwest communities. Cascade will install new systems in several newly franchised cities. Spokane Gas and Fuel will spend about \$5,000,000 for extending service throughout Spokane and the Spokane Valley.

Including expenditure for a pipeline from the Peach River fields of Northern British Columbia and Alberta, which will sell a supplementary supply of gas to Pacific Northwest Pipeline Corp., total investment in natural gas development will be close to \$500,000,000.

*General Management Conference hears a
warning against rate reductions in a field still seeking stability*

Trends in excess liability insurance

By R. S. GILLESPIE

*Special Risks Secretary
Indemnity Insurance Company of
North America
Philadelphia, Pennsylvania*

Most of us recall with uneasiness the rash of catastrophe losses which was first felt in 1947 and which culminated in the rearrangement of your liability insurance portfolios late in 1951 and early in 1952. As we look back on those developments we realize that they comprised the most serious crisis ever encountered by excess liability underwriters in any one classification of risk.

The gas industry, greatly disturbed by the restlessness of the market and by the need to rearrange its excess liability insurance at much greater cost, leaned heavily on the foreign market in order to complete the rearrangement. The crisis over, the market slowly stabilized at a new level.

Today your industry is finding it possible to secure adequate liability insurance at prices which are generally conceded to be reasonable. The reasonableness of these premium levels has been borne of the experience encountered during the years since 1948, and the catastrophe underwriter today has an unusually wide experience base on which to establish consistent prices. Since 1951 there has been a significant lessening of large losses in your industry nationally, due in large part, I believe, to your initiation of corrective measures revealed as necessary by the loss history.

The best evidence of this improvement is the renewed interest of some un-

derwriters in your catastrophe exposures, and the introduction of some excess markets to your industry for the first time. Competition has become keener, and it is my observation that three (sometimes four) markets are now quoting for current renewals, where only one or two quoted in 1952 and 1953.

A number of your executives and insurance advisors have impressed upon us, time and time again, their desire for a stable excess market. We have found that your insurance buyers are traditionally conservative, and are as much concerned with the reliability and steadfastness of the markets from which they buy insurance as they are with the offered prices. It is reasonable to conclude from our sampling that this opinion is widely held among gas companies.

Stable market defined

The opinions expressed to us by your executives and advisors compositely define a stable market as one which will not react violently when a grouping of large losses occurs, forcing the gas industry to rearrange its liability insurance in the face of shrinking capacities to absorb coverage, but, on the other hand, one which will yield to the carrier premiums adequate for the establishment of long-range reserves for such large losses, an adequate allowance for expenses of operation and a reasonable profit.

Is the current trend in rate levels supporting this concept; and are the latest rates capable of developing long-range reserves for losses rather than short-

range profit during a period of relative tranquility? In answering these questions we are, I believe, discussing the most important foundation of a stable market.

Rate reductions are being encountered which are not justifiable on the record as we see it, and which are, to say the least, premature. True, it was inevitable that all markets would retire somewhat from the prices established at the end of 1951 and there is considerable justification for so doing. Your industry has accomplished a great deal in the nature of technical improvements and encouragement of new standards and codes for the safe handling of your product. It is our judgment, however, that rate reductions currently taking place are inconsistent with the rate of improvement up to this time in the techniques and installations of your industry.

This conviction grows out of our own loss experience in handling a substantial volume of excess business, and has been stimulated by the examinations we have made of practically all our risks where insureds' retentions are under \$250,000. Very few risks have completed their programs for the location and elimination of hazards, and many risks are only getting started. Codes for safe practices are yet to be established in most areas, and we have encountered a number of risks whose installations still present the same shortcomings which contributed to many of the catastrophes of the past several years.

The difficulties in measuring the progressive aggravation of your catastrophe exposures after World War II, and in

reflecting that aggravation in rate levels, is equaled by the difficulty in measuring the degree and rate of moderation of exposures now taking place. It is easy to understand, in the face of these subtleties, how the current vigorous interest of carriers in your business is inclined to create excessive and premature rate reductions.

It is a fact, well-known but too easily overlooked, that an excess carrier cannot be certain as to the redundancy of his rate levels until he has tested them over a period of five years, and preferably over a longer period.

Whether the current subsidence of

rates ultimately will be termed moderate or excessive, is something no one can confirm with actuarial certainty. I can only say that in our judgment it appears to be premature and excessive.

My recommendations are that your insurance buyers take a good look at quotations which are far afield from the levels of 1954, and that they consider whether it is prudent management always to award your catastrophe coverage to the lowest bidder within a wide price range.

Excess coverages continue to be written widely over retentions as low as \$10,000 for bodily injury and property damage liability, combined, as respects any one

accident. I feel that this practice contributes a great deal to lack of steadiness in the market for catastrophe insurance; since a retention of this size today brings the excess carrier into the area of primary exposure.

Where policies are written to combine the general liability, automobile liability and workmen's compensation and employers' liability classifications, with a low single retention for all coverages as respects any one accident, the situation is aggravated still further. The measure of premium for the frequently invaded area between \$10,000 and \$25,000 is obviously very great, with the result that excess underwriters are collecting many premiums and are paying many losses which should not be permitted to influence a catastrophe market.

It must be recognized that over a period of time the premiums collected for this area of exposure will inevitably be in excess of the losses paid; so that what is occurring is a "swapping of dollars" by the insurance underwriter and the industry, with very little advantage to the insured.

In my experience, very few of the gas companies retaining a first loss of \$10,000 would be inconvenienced by carrying a retention of, say, \$25,000 or even more. In some instances, timidity is all that stands in the way of a higher retention, and in others a low retention is probably traditional, existing since the days when single claims were likely to be settled for moderate amounts.

The effect of inflation on settlement values has been to make a retention of \$25,000 today roughly equivalent to one of \$10,000 carried in the past, so that the insured is relatively in the same position. If it was logical to carry the first \$10,000 of loss in 1939 it is logical to carry the first \$25,000 at this time.

Today, this higher retention may even cause less strain due to the increased size and loss absorption potential of most operations. If your catastrophe covers are to function truly as such, these low retentions should be discarded.

Such a development would be beneficial both to gas companies and their insurers. The gas company would be relieved of a cost burden of some proportions; since a substantial part of the rate charged by the insurer for excess insurance must be assigned to the area of loss immediately above \$10,000. I think that if the industry will examine its own ex-

(Continued on page 50)

Too big, or too busy?

For the past year, the American Gas Association has been sponsoring a public relations program. This program is providing us with the tools to do a good job and will continue to do so, but unless each of us does his full share, I am sure all will go to naught.

I have long held the belief that the problem of consumer good will—or customer relations, or public relations—and our employee relations are so closely related that they may not be considered separately. The whole subject is so thoroughly tied up with the day by day operating policies and procedures that it is foolish to consider any aspect of it as a separate activity or function.

Are we "Too big or too busy" to gain the individual friendship and understanding of our employees? These employees are individual people just like our customers, and it is they who breathe life into an organization and make success possible.

Are we "Too big or too busy" to select the right people for supervisory jobs? Are we selecting people who not only know their job, but, and just as important, know and understand human beings? Are we keeping our supervisors fully informed on company policies, plans for future, changes within the company?

A well-informed supervisor, who knows his job, and understands men is one of the most important persons in any organization. To the employee, he is the "Boss", and not the "blankety-blank Boss".

Should the employee have to go to his union steward for information on his

retirement plan, sick leave, vacation, company policies, or any one of a dozen other things he wants to know, or should he be able to get the information from his supervisor?

Are we "Too big or too busy" to inaugurate schools for our employees in small groups of eight or ten, supervisors and union men together, taught by one of their own fellow employees? It is much better to use employees than abuse them, or be abused by them. Let them participate in your educational programs for the good of all.

Out of it will come, I believe, a better understanding of why we want to be utility employees, a better understanding of our fellow workers, a better understanding of human relations, and above all, it may reestablish the virtue of pride of workmanship in each and every employee so he will have a justifiable feeling of elation at doing the best job every time a job is done, no matter what its nature.

It is my belief that if we can instill enough pride in every employee, really train him in his position, and give him good information on all matters pertaining to company business, the employee relations job will be well along its way, and our public relations program will be given a wonderful lift.

We are not "Too big" but some of us have been "Too busy". Too busy doing the wrong things. We are going to have to change and be big enough to do the right things.—Excerpts from an address by M. B. Cunningham, out-going president, at annual convention of Mid-West Gas Association.

Trend to slow pay continues



CREDIT AND COLLECTION EXPERIENCE OF U. S. GAS AND ELECTRIC INDUSTRIES

JULY 1, 1954 TO DEC. 31, 1954, COMPARED WITH SAME PERIOD FOR 1953

SALES (DOLLARS)
OUTSTANDING (DOLLARS)
OUTSTANDING % OF SALES
NO. OF CUSTOMERS
NO. OF DISCONTINUE NOTICES
NO. CUSTOMERS DISC. N. P.
DEPOSIT OUTSTANDING (DOLLARS)
NO. ACCOUNTS CHARGED OFF
NET CHARGE OFF (DOLLARS)



• THE CREDIT PICTURE •

• All data used in the 13th semi-annual Credit Picture that appears below was gathered, collated and interpreted under supervision of Credit and Collections Committees of the American Gas Association and Edison Electric Institute. The previous six-month survey appeared in the November 1954 issue of the MONTHLY.

ago are showing about the same trends as were revealed in the last report for the period ending June 1954. The rate of increase for total net losses since June 1954 has declined a bit, but the change in outstanding accounts receivable balances has worsened appreciably.

During the past three six-month periods ending in December—1952-1954—the growth in sales and customers show consistent increases of about eight percent and 3.5 percent respectively, while the principal collections indices have fluctuated as shown below:

Collection results as disclosed by the Credit Picture data for the last six months of 1954 as compared to a year

	1952	1953	1954
Cycle Balance Ratio to Sales	+ 0.3%	- 3.8%	+ 3.7%
Number of Discontinue Notices	+ 5.4%	+ 2.6%	+10.3%
Customers Disconnected for Non-Payment	+10.4%	+15.4%	+22.1%
Deposits Outstanding—Dollars	+ 6.3%	+ 4.9%	+ 7.5%
Net Charge Off—Dollars	+21.5%	+24.5%	+28.3%

JULY 1-DECEMBER 31, 1954—COMPARED WITH CORRESPONDING DATA JULY 1-DECEMBER 31, 1953

	NEW ENGLAND	MID ATLANTIC	EAST NORTH CENTRAL	WEST NORTH CENTRAL	SOUTH ATLANTIC	EAST SOUTH CENTRAL	WEST SOUTH CENTRAL	MOUNTAIN STATES	PACIFIC STATES	UNITED STATES TOTAL
Percent Change										
SALES (Dollars)										
Total Sales	+ 3.7	+ 4.9	+ 6.9	+12.2	+10.2	+11.0	+13.1	+ 7.7	+ 8.3	+ 7.8
Total Sales (Excl. Ind.)	+ 5.9	+ 7.5	+11.6	+15.1	+12.0	+13.5	+17.1	+ 9.7	+ 8.2	+11.1
OUTSTANDING (Dollars)										
Gen. Led. Bal.	+18.0	+ 4.3	+17.4	+15.0	+11.9	+ 6.0	+ 5.1	+ 6.3	+11.4	+11.7
Cycle or Past Due Bal. (Excl. Ind.)	+35.4	+21.6	+22.4	+13.8	+41.0	+15.9	+17.1	- 4.4	+ 5.8	+17.2
OUTSTANDING—% of SALES										
Gen. Led. Bal. to Total Sales	+13.8	0.0	+ 9.5	+ 2.6	+ 1.9	- 4.6	- 7.1	- 1.2	+ 2.8	+ 3.7
Cycle or Past Due Bal. (Excl. Ind.)	+24.2	+22.2	+11.1	+ 1.8	+27.0	0.0	0.0	-11.5	n.a.	+13.2
NO. OF CUSTOMERS	+ 1.1	+ 1.3	+ 2.5	+ 3.2	+ 4.2	+ 4.4	+ 3.3	+ 4.9	+ 6.3	+ 3.4
NO. DISCONTINUE NOTICES	+ 2.9	+ 8.6	+23.6	+18.0	+ 6.2	- 0.6	- 3.6	+19.8	+23.6	+10.3
NO. CUSTOMERS DISCON. N. P.	- 3.5	+16.2	+40.0	+27.9	+25.8	+24.4	+14.8	+ 8.9	+29.7	+22.1
DEPOSIT OUTSTANDING										
Number	+17.8	+10.2	+ 3.1	+ 9.1	+ 3.3	-58.6	+11.9	+ 6.1	+12.4	+ 4.0
Amount	+ 1.2	+10.1	+ 7.0	+ 7.5	+ 9.9	- 4.4	+ 4.8	+ 3.5	+14.9	+ 7.5
NO. ACCOUNTS CHARGED OFF	+18.1	+13.1	+37.8	+17.8	+29.8	+16.9	+10.1	- 2.0	+10.0	+17.6
NET CHARGEOFFS (Dollars)										
Net Chargeoffs (total)	+47.8	+19.8	+66.3	+64.9	+30.2	+ 3.0	+15.8	+21.8	+ 9.6	+28.3
Total Chargeoffs (less Ind.)	+ 9.2	+19.6	+69.9	+18.6	+24.1	+11.7	+14.6	- 2.8	+11.1	+28.9

The data for the current report were supplied by 81 companies. Some of the more significant trends disclosed were:

Only ten companies could report a decrease in the number of Discontinue Notices issued—and three of these were reported as due to changes in policy.

Fourteen companies disclosed increases of over 50 percent in the number of customers disconnected for non-payment, with two of these companies indicating over 100 percent increases. Eighty-five percent of the companies reporting on this item showed greater disconnect totals than last year.

Sixty-two disclosed an increase rate of net charge-off in excess of the rate of growth in sales.

Twenty-nine companies had net losses in excess of 50 percent over 1953, including 11 companies whose

losses jumped over 100 percent.

Companies reporting separate net losses from industrial customers showed \$40,000 of losses in the December 1954 period compared to \$25,000 in the last report.

The ratio of net losses to sales increased to 20/100 of one percent in the current report compared to 18/100 of one percent in the June 1954 report and 17/100 of one percent in December 1953.

The present picture is not a good one.

There are some bright spots among the various companies' reports, but certainly the over-all trends are not encouraging. Efforts are being made by individual companies to combat the situation as evidenced by the greater emphasis given to deposit security and a general tightening up in collection policy. All geographical divisions, except one, report increases in the number and amount of

customer deposits. Six companies reported changes in collection procedures, but in all six each had a greater number of service denials for non-payment than last year.

From preliminary figures reported, the increases in total net losses for gas and electric operations separately during the six months ending December 1954 were consistent with the over-all 28.3 percent increase shown for all companies, with electric operations showing a 28 percent rise and gas operations a 31 percent rise. A more detailed study now in progress of trends from 1949 to 1954 shows gas losses per dollar of total revenue are consistently higher—nearly two to one—than for electric. A separate report of this latter study was to be made by the Credit Picture Committee at the National Conference of Electric and Gas Utility Accountants held in April.

A.G.A. Labs hold open house for neighbors and friends

AS PART of a continuing community relations program, the American Gas Association Laboratories in Cleveland recently held open house for approximately 400 neighbors, employees' families and friends. The occasion afforded business and residential neighbors an opportunity to see the inside of the gas industry's national appliance testing agency which forms a part of the local community. In addition, the recently erected north wing building addition to the Cleveland Laboratories, constructed on adjacent land previously zoned for residential use, was open for inspection.

Upon arrival, visitors were greeted at the main entrance by the Laboratories Director, Edwin Hall and his staff. They were assembled into appropriately sized groups and escorted on a tour of the Laboratories by staff members. These escorted tours provided the visitors an opportunity to inspect the behind-the-scene activities as well as for the guides to present the story of the Laboratories' operations.

The Laboratories visitors were shown demonstration set-ups illustrating the unique safety tests performed on gas appliances in order to qualify for display of the Laboratories registered Approval Seal. They saw the latest in modern testing instruments: infra-red CO analyzers; multi-point temperature recorders; automatic oxygen indicators and many other instruments which are used daily in the Laboratories' operations to check the safe operation, durable construction and efficient performance of modern gas equipment.

Research for the gas industry under the PAR program was shown to the visitors in a number of advance experimental appliance designs. Featured were an experimental muffle oven in which no flue gases enter the cooking chamber,



A. G. A. Laboratories Staff Member Albert Chabek (back to camera) explains tests given to gas furnaces to a group of neighbors who attended the Laboratories recent open house in Cleveland, Ohio

an experimental "golden glow" gas broiler that broils steaks to perfection, and a "vary hot" top burner with a head no larger than a nickel. Also on exhibit were a number of research projects of major importance to the gas industry under study by the Laboratories' scientists and research engineers.

Following the tour of the Laboratories, guests were served light refreshments and shown a 30-minute, full-color sound movie on the gas industry. At the conclusion, there were gifts for all—a brief history of the Laborato-

ries, blue and white pot holders for the ladies, card wallets for men and balloons for children.

Compile FPC rules

AN up-to-date compilation entitled *Federal Power Commission General Rules and Regulations under the Natural Gas Act* has recently been published as a reference manual. Copies may be obtained for \$3.50 by writing to: Robert M. Harris, 3728 Gilbert Drive, Shreveport, Louisiana.

Dial card vs. estimated billing: cards are trusted by customers while estimated bills are generally more favored by accountants

Dial cards can be efficient

By E. K. SCHNEIDER

*The East Ohio Gas Company
Cleveland, Ohio*

Are you estimating "no read" accounts because you think your customers like estimated bills or is it because of your mechanized billing systems? It is easier to bill all the accounts on the scheduled billing day than to bother with "late mailed" bills. Why bother to bill actual readings that are received late when it is so easy to estimate?

Easy on your billing and accounting systems, but perhaps hard on your customer relations.

A recent comprehensive survey, made by the A. G. A. Customer Accounting and Customer Relations Committees, indicates that the most serious complaints received from our customers develop from our attempt to render an accurately estimated bill. With the ever growing number of heating customers, estimating becomes increasingly difficult in the spring and fall and is certain to cause adjustments where the customer is away.

Another startling disclosure concerning high bill complaints was made by the summary of a survey presented at the National Conference of Gas and Electric Utility Accountants in April, 1954. Of the gas companies responding, estimated bills caused from 17 percent to 32 percent of all high bill inquiries.

In spite of these facts, the majority of the companies in our industry render estimated bills when they are unsuccessful in obtaining a reading. While trying to encourage customers to help them ob-

tain a reading on one hand, they are discouraging their help by rendering them an estimated bill.

Does a policy of *not* estimating help obtain readings? At East Ohio, we believe it does.

We have approached this problem with the thought that a reading by our



E. K. Schneider, field accounting manager, East Ohio Gas Co., is past-chairman of A. G. A. Customer Accounting Committee

reader or a reading obtained from a customer dial card is the optimum.

Since 1945 our customer dial card return has been increasing and we now receive 700,000 readings per year or nearly nine percent of our total readings by this method. Of the cards left when we are unable to gain access to read the meter, approximately 75 percent are returned.

Seventy percent of these are returned in time for the regular billing. The other 30 percent are returned two or three days after the regular bills are prepared and could not be used if we estimated. Will customers continue to return dial cards if they are not used? We do not believe they will.

If we are consistently unable to obtain a reading and the customer does not return his dial card, he is encouraged to register a key with us. A total of 20,000 keys have been procured in this manner thus insuring us 240,000 readings per year. This enables us to obtain readings in the majority of cases where all members of the family work.

Encouraging customers to help us obtain readings reduces special reading costs. Under our plan, dial cards are accepted for seven consecutive months before a reading by our reader is required. This in contrast with the two or three months that the majority of companies will estimate before requiring an actual reading. With the cost of a special reading being at least \$1.50 when all factors including special handling are considered, this becomes a sizable item in reading costs.

With our policy of *not* estimating, our readers and customers both put forth more effort to see that a reading is secured.

This approach enables us to render bills to 97.4 percent of our customers each month. The number of customers not billed has decreased over the years as more customers help us to obtain readings.

The East Ohio Gas Company has 21 offices that serve 95 communities in

northern and eastern Ohio. It has 675,000 customers; 540,000 or 80 percent of them use gas for heating. The largest office, Cleveland, serves 400,000 customers. Akron serves 103,000; Youngstown 67,000 and the others a smaller number—down to our smallest division office, Dover, with 3,300 customers.

Because of our 80 percent saturation of heating customers, we are concerned about the 2.6 percent of our customers where we do not get a reading. We want our heating customers to receive a bill each month during the winter so elect to send them a "Memo Bill" when we are unable to obtain a reading. This is done because of the desire of our customers to pay a heating bill each month and our desire to reduce the amount due on the following two-month heating bill.

At this point you may well ask, "How do memorandum bills differ from estimated bills?" The following outline that tells you what a memorandum bill is and how it is handled will depict to you the differences and advantages.

Memorandum bills are rendered for the amount we determine the customer owes for the month. They do not become part of accounts receivable, are not subject to additional charge and are not subject to collection effort. Payments of memorandum bills are handled in the regular manner and at a cycle closing are handled as a credit and applied to the next regular bill.

Memorandum bills carry the following message to the customer:

MEMORANDUM BILL

We have not received the reading card our meter reader left when he was un-

able to read your meter. We are, therefore, rendering a Memorandum Bill, so that you may make a monthly payment.

Memorandum bills are rendered to all heating customers whose meters were not read and who did not return their customer reading card by the third working day after the regular bills are mailed. We have found that practically all of the customer dial cards and special readings are received and late mailed bills rendered by that time.

The amount of the bill is determined by arriving at the average percentage of increase or decrease during the month of 20 residential heating accounts in each district whose meters were read. This percentage is applied to the last month's bill and a memorandum bill showing money only is rendered.

Estimating eliminated

Memorandum bills eliminate the need for estimating, which is a major source of customer irritation. The expensive job of adjusting accounts and the overall bad customer reaction is eliminated.

Memorandum billing does not change any of our regular reading, route book audit or billing procedures.

Model 9300 Addressograph and IBM equipment is used to prepare the postcard bills. Tabulating cards are used as the accounts receivable record.

The customer accounting department prepares the records used by the tabulating department for memorandum billing. Three days after the regular bills are mailed, the postcard bills and advance cards for heating customers not read for 30 days are selected and stamped with the memorandum bill stamp.

The previous month's consumption is entered on the blank advance card and "MB" is stamped on the corresponding route sheet. The advance cards, postcards and arrears cards are forwarded to the tabulating department along with the correction factor (percentage of increase or decrease) applying to the district to be billed.

The tabulating department key punches the memorandum bill advance card showing the correction factor, previous consumption, current date and an identifying X punch. The cards are then processed through the 604 IBM electronic calculator to compute and punch the memorandum consumption and amount. The arrears are sorted with the billing cards and the postcard bills are prepared.

After the bills are prepared, the tabulating cards, bills and arrears cards are returned to the customer accounting department. The bills are mailed, arrears cards returned to the accounts receivable file and the tabulating cards filed as a separate group in back of the accounts receivable file.

After payment is made, the memorandum tabulating cards are used to reproduce a credit tabulating card which becomes part of the accounts receivable and is deducted mechanically from the next regular bill.

This briefly outlines the method used in preparing memorandum bills. The additional billing expense is small and does not make any appreciable difference in our over-all billing and accounting costs.

During the 1953-54 heating season, we rendered 60,000 memo bills. Of these, approximately 63 percent or 38,000 were paid before cycle balance. The number paid seems to bear a relationship to the size of the town. The smaller the town the larger the percentage paid. Our largest division averaged 55 percent, while the other divisions averaged 75 percent with a high of 81 percent in one town with 3,000 customers.

Memorandum billing is applicable to any type of billing system. When necessary to compute and prepare the bills manually, a great deal of time can be saved by using charts to apply the percentage of increase or decrease.

Customers like memorandum bills. In cases where an objection is raised concerning the size of the bill, an explanation that they may pay any amount they desire as it will be handled as a credit and applied against the next regular bill satisfies the customer. They usually pay the amount rendered without further question.

Memorandum bills eliminate the need for costly adjustments—costly in customer confidence as well as in dollars. Adjustments leave a question in the customer's mind regarding all bills rendered in the future. Many high bill inquiries can be attributed to doubt raised in the customer's mind by a previous bill that required an adjustment.

There is no way of knowing the number of complaints and adjustments that would be received if we estimated, but we do know that memorandum billing causes few inquiries and no adjustments.

Some might question the effect of the

Record retention guide

● The government has just issued a guide to the provisions of federal laws and regulations relating to the retention of records by the public. The compilation covers the requirements of all federal agencies, but does not include requirements as to the furnishing of reports or the filing of tax returns. This useful summary was published in the "Federal Register" of Friday, April 8, Volume 20, Number 69, and is available at a price of 15c per copy from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D. C.

unreported revenue. The fact that all but 2.6 percent of our accounts are rendered regular bills makes the percentage of unreported revenue insignificant.

Memorandum billing helps develop customer cooperation in returning dial cards and registering keys. However, this cannot be accomplished overnight. It takes a lot of patient explanations:

Why an actual bill each month helps the customer as well as the company, why the company must obtain periodic readings, how the customer can help by returning his dial card, etc.

Notify the customer if you cannot use the dial card he has returned. Let him know if it was returned late, or the reason why it could not be used. Contact

customers who are seldom home and encourage them to give you a key. Most customers are anxious to help if you give them a chance.

Memorandum billing will eliminate your most irritating complaints and adjustments. It is one way of improving your customer relations with very little additional effort or expense.

Utilities back New Freedom kitchen program

America is sold on gas—and to promote an even greater acceptance of gas in the home, utilities across the country are sold on New Freedom Gas Kitchen and Laundry displays.

Since the American Gas Association started the program in 1944, kitchen displays have proved a popular and profitable way for gas companies to keep their customers abreast of appliance innovations. According to a detailed study conducted during March by American Gas Association's New Freedom Gas Kitchen Bureau, the great majority of gas companies are more keenly interested than ever in building kitchen and laundry displays on their sales floors. In fact, of the utility sales managers polled, the overwhelming majority of 72 percent replied that they rely on an active kitchen program or intend to begin one very soon. The 81 companies replying to the survey maintain 280 complete kitchen-laundry dis-

plays on their main and branch office sales floors. The survey revealed a tremendous increase in gas company interest in built-in ranges, as well as the possibilities of the built-in gas refrigerator, washer and gas dryer. Forty-two percent of the companies replying offer their customers kitchen planning service on their sales floors, while 67 percent cooperate with the kitchen cabinet dealers in offering this service.

Sixty percent work with local kitchen dealers in exchanging kitchen and appliance leads, and slightly greater number, 65 percent, work with cabinet manufacturers to sell gas appliances to builders of new homes.

Companies that have done the most with the New Freedom Program in the past are most enthusiastic, and are the most interested in expanding their kitchen displays in the future. Other interesting results were the fact that the majority of display kitchens are only one

year old or less. All except three replied that their displays are under five years in age. Display modernization is not usually considered, but rather, complete replacement or rebuilding.

One of the questions in the kitchen survey was "How can A. G. A. be more helpful to you in working with local and national kitchen cabinet manufacturers?" Some of the revealing and constructive answers to this pertinent question were: a kitchen planning manual on built-in ranges for architects and builders; more advice to cabinet manufacturers of A. G. A. plans; increased cooperation between cabinet manufacturers, built-in range manufacturers and utilities; architect-slanted catalogs including prices and spec sheets from cabinet manufacturers; regulation of cabinet and built-in range sizes; slide films and manuals for home demonstrations, and how-to-do-it material on gas kitchen remodeling.

Gas Measurement Committee publishes Report No. 3

a PAR activity

ORIFICE METERING OF NATURAL

GAS, Gas Measurement Committee Report No. 3" has just been published by the American Gas Association. This manual covers recommendations relating to the use of certain types of orifice meters used in the measurement of natural gas.

Report No. 3 will supplement Report No. 2 which was first published by A. G. A. in 1935. Since 1948 extensive additional research, sponsored by A. G. A. and others, has contributed to the new material included in Report No. 3. In 1953, a Supervising Committee for Pipeline Research Project NX-7 was organized for the purpose of preparing Gas Measurement Committee Report No. 3 in the light of the results of this research.

Generally all the data in this report are quite similar to those included in Report No. 2 except that new data, based on this research, have been added to cover a much wider range of conditions.

Report No. 3 will include the following features:

1. Data on larger diameter and heavier wall thickness metering runs
2. Details on specifications and tolerances of orifice metering installations
3. A method of evaluating supercompressibility factors

The pressure base for the basic orifice factors has been changed from 14.4 to 14.73 psia; however, a table is given which expedites the computation of gas flow in terms of any contractual pressure base.

As announced in the March issue of A. G. A. MONTHLY under a report on "1955 Pipeline Research Plans", operating tables of supercompressibility factors computed by the method given in Report No. 3 are now being prepared and these will be available this Spring.

Copies of this report, priced at \$2.50, can be ordered from American Gas Association, 420 Lexington Ave., New York 17.



*Sales experts teach
industrial-commercial men
load landing pointers*

Cover wide field at sales meet

The 1955 A.G.A. Sales Conference on Industrial and Commercial Gas held in Boston, April 12-14 was the largest held in recent years with some 250 delegates present. It assumed the character of a typical New England Town Meeting and on many occasions there were from two to five men speaking on the same subject. It was a program packed with talks on timely topics from the first paper of Commercial Gas Day to the last word on Industrial Gas Day.

Leading off on Tuesday with a subject topmost in the minds of commercial gas men, James J. Condon, manager, commercial sales department, The Peoples Gas Light and Coke Co., Chicago, made out an excellent case for gas fryers. No doubt was left that gas fryers could meet all the claims of competitive manufacturers. Mr. Condon said, "The gas industry now has available deep fat fryers that will out-perform any deep fat fryer that has been made in bygone years."

He stated that we could protect this frying load which is rightfully gas if,

Chairman Ray Trowbridge (left), Seattle, welcomes E. H. Eacker, Boston, to A. G. A. Industrial and Commercial Gas Sales Conference



L. E. Biemiller (right) Section vice-chairman, greets fellow-Baltimorean J. T. Wolfe, who spoke on Gas Industry Development Program



"We get the true facts before the eyes of of the restaurant operator. He is in business to make money. Get the story to the right people. Hold frying demonstrations for restaurant associations and dealer groups. By a united effort . . . we cannot fail in spite of competitive claims."

Mr. Condon's paper sounded the keynote for the first of several Town Meeting panel discussions. He was followed by Charles C. Hanthorn, manager, hotel and restaurant division, Philadelphia Gas Works Division, The U.G.I. Co., Philadelphia, who discussed the dealer phase of promoting and selling the gas deep fat fryer.

"It is the responsibility of the gas utility to promote the sale of deep fat fryers," he said. "It is our job to see to it that every user knows that gas fryers have got it." He then set forth ten steps that dealer and utility salesmen should follow in selling deep fat fryers.

Next came E. V. Fineran, industrial sales manager, Washington (D.C.) Gas

Light Company. His part of the panel discussion had to do with the ten points of superiority of the gas fryers. Also on this panel was W. W. Gilmore, sales manager, The Frymaster Corp., Shreveport, La., who presented data on what modern deep fat fryers can do as to performance and what they can do for the restaurant operator.

Another manufacturer, Richard T. Keating, managing director, Frying Equipment and Supply Co., Chicago, stated that when selling a fryer to a restaurant operator one must talk his language. Tell him things he can understand as related to his individual establishment. He also cited some case histories of operators and the many idiosyncrasies of chefs that could be played up to combat competition. The way to sell fryers, he said, was to be on hand at the opportune moment.

Harry B. Wilson, commercial sales manager, The Brooklyn Union Gas Co., took up the cause of gas bake ovens in his address on "Gas Has Got It for Bak-



Old friends at Industrial Gas Day (l. to r.): F. K. Whieside, Philadelphia; J. D. Lynch, Boston; Herman Gehnrich, Woodside, N. Y., and G. R. Van Kampen, Cliffside Park, N. J.



Hall of Flame certificate winners were (l. to r.): Paul Grimes, New York; J. V. Hall, Hammond, Ind.; J. D. Haverkamp, New Orleans; E. J. Horton, Greensburg, Pa.; K. I. Robinson, Newark, N. J.; G. R. Walton, Houston. T. M. Offut, Washington, D. C., and Jack Mikula, Milwaukee, also won the award

I&C Sales Conference speakers exchange notes (l. to r.): D. C. Campbell, Rockford, Ill.; C. C. Eeles, Columbus; Herman Koester, Jr., Wellesley Hills, Mass.; A. H. Koch, Toledo, and R. J. Reed, of Cleveland, Ohio

ing Too!" His paper treated on the various types of oven equipment that would be used by neighborhood bake shops, large restaurants and hotels in fact, all baking applications except those of the giant wholesale commercial bakeries. His discussion covered peel ovens, revolving tray ovens, deck ovens, and pizza pie ovens, and the fuel aspects of these different types. Also covered in part of the paper were the indirect or muffle type oven together with controls.

Mr. Wilson stated that there was a problem in this field facing the utilities, that of obtaining improvements in equipment. "This means new types of equipment as well as improvements in existing equipment," he said. "We can do a great deal for ourselves in the baking field . . . by becoming more equipment conscious." He contended that, "Our trouble is that we are not making good enough use of the higher priced equipment . . . we have been too price-conscious even where competitive equipment is sometimes priced three or four times higher."

The symposium on commercial incineration turned out to be another Town Meeting with considerable discussion. George E. Marble, assistant to industrial engineer, Michigan Consolidated Gas Co., Detroit, moderator, reviewed a little of what had been done in this field. His main point was that any incinerator design should not only build a gas load but meet the public health requirements of communities.

Mr. Marble's co-panelists were a commercial incinerator manufacturer and a burner manufacturer. The former, Richard Goder, president, Joseph Goder, Inc., Chicago, presented the need for incinerators. They save refuse handling cost, protect premises from intrusion by strangers, guard against confidential material going out and rejected merchandise being resold. Space saving, sanitary conditions and other advantages were stressed.

Stuart M. Truitt, district manager, The North American Manufacturing Co., Plainfield, N. J., burner manufac-

turers, spoke on the firing of incinerators. He cited several case histories on installations of different types of incinerators and stated that considerable experimentation was being conducted to establish the proper type of secondary burner to eliminate fully smoke and odors.

"The Advantages of Gas in Your Kitchen" was the title of a paper presented by Joseph N. Betz, commercial sales manager, The Manufacturers Light & Heat Co., Pittsburgh. This was an illustrated presentation of commercial cooking equipment such as might be made to a school board, hospital executives or other institutional groups. It covered every phase of a gas kitchen with

- A check sheet will be included in the next Section mailing for those who wish to have reprints of the papers that were presented at the 1955 A. G. A. Sales Conference on Industrial and Commercial Gas.

comparative costs of competitive equipment and other fuels. The delegates were taken step by step through the entire sales story.

One of the most important Commercial Gas Day panels was that on water heating. With increasing regulation by governmental authorities over sanitation in public eating establishments, the question of "Enough Hot Water, Hot Enough?" is paramount in this field. Harmon Boyes, Chatham, Ont., stated, "It is not difficult to persuade a prospect that he should use gas. When we tell him of the speed, economy, cleanliness, etc., he is sold. But often when he discovers that the equipment necessary will cost several hundred dollars, he loses interest."

Mr. Boyes covered the technical aspects

stressed the necessity of correct sizing especially in a restaurant where hot water must be provided for sanitary purposes in addition to pot and dishwashing.

Edwin S. Mack, Chattanooga Gas Co., spoke on tankless water heaters and emphasized the need for careful selection of a heater, especially in multiple dwellings. One heater, he stated, cannot be expected to do all jobs. They must be selected by type for the particular job at hand and sized correctly.

In place of D. E. Dillion, The Brooklyn Union Gas Co., who was unable to attend the conference, Harry Wilson presented a paper on the use of immersion coil storageless heaters for volume hot water. He listed 12 advantages of this type of heater, among which were:

immediate past-president of A. G. A., who gave a most gracious welcome to Boston for the assembled conference delegates.

Mr. Eacker reminded his audience that the Boston area was the greatest research and educational center of the world and invited the delegates to visit them. He reviewed the history of the gas industry from the first public lighting in Baltimore to the discovery of the first natural gas in Fredonia, New York. Developments since the first five-mile pipeline near that site to the giant transmission lines of today have come about during the past 50 years. Much of this development, Mr. Eacker continued, has been due to the activities of A. G. A. and its Testing Laboratories. He concluded by emphasizing that industrial and com-



Air Conditioning symposium members (l. to r.): R. C. Marsh, Detroit; Victor Cole, Syracuse; and W. J. Hoeing, Evansville, Ind.



J. J. Condon leads gas fryer discussion. Other panelists, l. to r.: C. C. Hanthorn, E. V. Fineran, W. W. Gilmore and Richard Keating

of many types of installations, and discussed at considerable length small inexpensive conversion units for coal pots. Many instances were related on the success and economy of those units that had been installed for summer use and then continued on to all year service for hot water.

He was followed by Don Williams, A. O. Smith Corp., who spoke on the hot water requirements for dishwashers with special emphasis on separate 180 F water for final rinse. He said, "More than half of the service calls on commercial machines are the result of inadequate hot water—inadequate in either temperature or volume or both." He

simple installation; small stand-by loss; no circulating pump required; minimum space; long life; and versatility.

Finishing up for Commercial Gas Day was Robert Parks, owner-manager of The Howard Johnson Restaurant in nearby Concord, Massachusetts. He brought a refreshing viewpoint to the meeting as a gas customer. He gave out a few hints as to what direction appliance manufacturers might take in increasing production efficiency and reducing labor costs.

The Section chairman, Ray Trowbridge, Seattle Gas Co., who presided each morning, opened the general session by introducing E. H. Eacker, president, Boston Consolidated Gas Co., and

mercial gas together with the activities of the Section were most important to the entire gas industry.

From Cambridge, Mass., Roy Wright of the NEGEA Service Corp., brought some interesting sales points to the attention of the delegates. He said, "I came here to point out and re-emphasize the fundamentals of selling. Not that you don't know them, but because you and I sometimes forget them and tend to by-pass them. When we by-pass fundamentals, we get into trouble. That is when we make it easy for our competitors. That is when our progress in building new loads becomes harder and more difficult."

Mr. Wright went on to detail some of the things salesmen must do—how they should go about their job in promoting commercial business especially with the dealers.

Another factor in equipment selection is the change in foods and American eating habits. Frozen foods are occupying a bigger segment of our food supply today than ever before, and this trend is growing. John Daniels, vice-president of the famous Washington Hot Shoppes, Inc. and representing the National Restaurant Association, spoke on what is needed to make the most of present-day frozen foods. Their serving in a proper manner will spell profit or loss to the restaurant operator today.

The first panel on the general session was a symposium on air conditioning on

bership in the Industrial and Commercial Hall of Flame. Eight men received their awards, the largest group to be so inducted since the charter members. There are now 152 in this exclusive organization. Those admitted this year were:

Paul C. Grimes, sales manager, The G. S. Blodgett Co. Inc., Burlington, Vermont.

James V. Hall, manager of commercial gas sales, Northern Indiana Public Service Co., Hammond, Indiana.

John D. Haverkamp, commercial supervisor, New Orleans Public Service Inc., New Orleans, Louisiana.

E. J. Horton, assistant to the president, Robertshaw-Fulton Controls Co., Greensburg, Pennsylvania.

J. H. Mikula, general sales manager,

day, Tom Dowd, traveling secretary of the Boston Red Sox. Tom Dowd regaled his audience with a continuous stream of baseball anecdotes which kept the luncheon guests in gales of laughter. They covered humorous incidents of teams and individual players.

Lawrence E. Biemiller, Section vice-chairman, who presided each afternoon, opened the session by introducing his own executive vice-president, J. Theodore Wolfe of the Baltimore Gas and Electric Co., who is chairman of the A. G. A. Gas Industry Development Committee. Mr. Wolfe gave the background of his committee and stressed the point that this was a long-term project which had many ramifications.

He stated that, "The 'Giddyap Program,' as its nickname implies, is really



George E. Marble moderates symposium on incineration. Other panelists (left to right): Richard Goder and S. M. Truitt



Personnel selection-training panel (l. to r.): J. H. Coates, N. Y.; H. A. Sutton, Newark; C. Wierum, Brooklyn and W. W. Selzer, N. Y.

which three specialists discussed this phase of the gas industry. They were Victor Cole, Carrier Corp., Syracuse, N. Y.; W. J. Hoeing, Servel, Inc., Evansville, Ind.; and Robert C. Marsh, The Ready-Power Co., Detroit, Michigan. These gentlemen discussed in detail how their systems worked and how gas service fitted in each particular air conditioning system. It was pointed out how they could especially benefit gas companies by means of a profitable summer load.

What has become a tradition at the annual spring conferences took place at the end of the morning session—the presentation of certificates of life mem-

Milwaukee Gas Light Co., Milwaukee, Wisconsin.

Thomas M. Offutt, assistant industrial sales manager, Washington Gas Light Co., Washington, D. C.

K. I. Robinson, supervisor, industrial fuel, heating and air conditioning departments, Public Service Electric & Gas Co., Newark, New Jersey.

G. R. Walton, industrial engineer, United Gas Pipe Line Co., Houston, Texas.

Following the usual custom, the formal luncheon was held on the day of the general session. One of the highlights of the luncheon, attended by nearly 150 delegates, was the guest speaker of the

a program of action," and outlined the 15 points of this action. "Our greatest need," he said, "is to revive the concept of gas, not as a fuel, but as a public utility service. We need to sell it on the basis of what it will do, not simply what it will cost. In order to do this, we need to make available gas consuming equipment which will give the customer not only a prescribed number of heat units but the maximum degree of convenience, cleanliness, coolness, and control."

In conclusion, Mr. Wolfe said, "I am a strong believer in the sale of firm industrial gas, not at rates which will make it an obvious bargain as a fuel, but at

(Continued on page 56)

Gas operating men gather at four-day meeting on distribution, automotive and corrosion problems

Seek 'best ways' at conference



Distribution Committee Chairman H. M. Blain greets guest speaker Dale M. Hornung, Michigan United Fund, and E. S. Fields, spokesman for host company, Cincinnati Gas & Electric



F. H. Bunnell (left), Distribution Committee vice-chairman, confers with Wednesday General Session speakers: (l. to r.) B. F. Worley, M. G. Markle, Paul Kraemer and George M. Babble

Gas operating men gathered in near-record numbers at the four-day American Gas Association Distribution, Motor Vehicles and Corrosion Conference held at the Netherland Plaza Hotel, Cincinnati, April 12-15. Meetings often reached overflow proportions as the almost 1,200 delegates and visitors participated in general sessions, specialized meetings and various luncheon conferences.

Out of the 23 meetings held during the course of the four days emerged a picture of a great industry's engineers and technicians seeking the most efficient

and economical ways of performing their varied tasks. As at each Conference, the A. G. A. Operating Section provided a forum for those men who, either individually or collectively, have made contributions in the vital fields of gas distribution, corrosion prevention, customer service and transportation.

General sessions were held during the mornings of Tuesday, Wednesday and Thursday. H. M. Blain, New Orleans Public Service, and F. H. Bunnell, Consumers Power Co., chairman and vice-chairman respectively of the Distribution Committee, presided on alternate days.

Delegates were welcomed to Cincinnati by E. S. Fields, Cincinnati Gas and Electric Co., at the opening session. A feature of the Conference was inspection trips to Cincinnati Gas and Electric facilities, including a new downtown garage, an electric load dispatching center and a model service building incorporating a meter shop and garage.

Guest speaker at this session was Dale B. Hornung, Michigan United Fund, who complimented utilities on the progressive role they play in community endeavors.

Distribution men at the Conference

were keenly interested in a discussion of the revised Section 8 on Gas Transmission and Distribution Piping of the Code for Pressure Piping, ASA B31.1. This new code, just released by the American Society of Mechanical Engineers, is the result of three years' intensive work by a 72-man committee. Included are standards relating to gas distribution from the city gate to the customer's gas meter.

A five-man panel, presided over by F. G. Sandstrom, Consolidated Edison Company of New York, spoke on the new code with emphasis on its effect on distribution operating and maintenance procedures. All of the speakers were active in formulating the new code. F. S. G. Williams, chairman, ASA Sectional Committee B31, told the delegates what steps are being taken to keep the code in step with technological advances made

in the gas industry.

The general session on Wednesday morning centered around distribution questions. In a paper entitled "Cutting Costs in Distribution Department Work," Georg M. Babbe, Southern California Gas Co., discussed cost cutting methods uniquely applicable to gas distribution work. Of particular interest, Mr. Babbe said, is the development of crew sizes which result in the most economical balance between equipment costs and labor costs, with the aim of avoiding standby time resulting from overmanned crews. After reviewing experiences of his own company, Mr. Babbe said that extensive on-the-job observations may be necessary to identify factors leading to high costs and to develop means of reducing them.

Other speakers at the Wednesday ses-

sion were B. F. Worley, United Gas Corp., who spoke on installation, operation and maintenance of service type regulators; M. G. Markle, Northern Illinois Gas Co., reporting on his company's use of cathodic protection against corrosion; and Paul Kraemer, Minneapolis Gas Co., who described the use of IBM mark-sensing cards to analyze service causes. (Abridged versions of the latter two papers appeared in April, 1955, issue of A. G. A. MONTHLY.)

The Thursday morning general session opened with a task group report on methods used to prevent overpressure in distribution systems. Delivered by the group chairman, M. Anuskiewicz, Jr., The Brooklyn Union Gas Co., the paper reported examples of installations made by companies of all sizes throughout the



Speakers at Plastic Pipe Standards Session gather around display shown by C. H. Webber (second from right), Tucson (Ariz.) Gas, Electric. Flanking Mr. Webber are Bert Montell (l.), SPI, and J. F. Fugazzi, who moderated panel



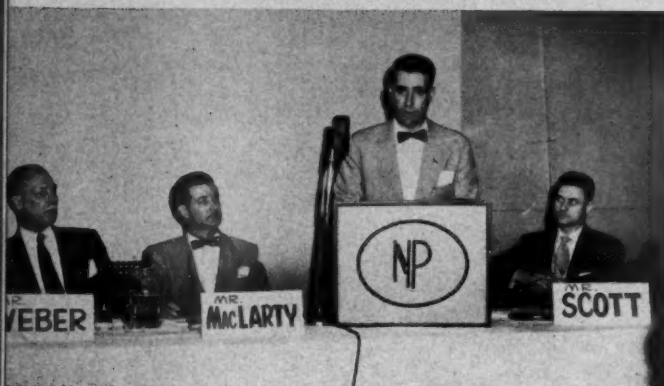
Highlight of first session was discussion on B31 Section 8 Code. Left to right are J. F. Collins, Section vice-chairman, and Code speakers F. G. Sandusky, A. H. Cramer, G. D. Mock, F. S. G. Williams and D. M. Workman

Participating in one of six automotive and mobile equipment sessions were Tom C. Kendall, Delco-Remy Div. of General Motors; William Denton, B. F. Goodrich; Randolph Whitfield, chairman, EEl Transportation Committee



Crowded scene at registration tables reflects interest and enthusiasm of delegates to Cincinnati Conference. These busy girls signed up almost 1100 paid registrants, nearly a record, and handled details for luncheons





Customer Service

Speaking at first of two luncheon meetings is W. G. Hulbert, East Ohio Gas. Others shown are Vice-Chairman W. H. Weber, Chairman John MacClarty, and H. W. Scott

Construction and Maintenance

Panel on construction and maintenance work organization was moderated by C. A. Brown (right of speaker). Far right, R. C. Holcombe, subcommittee chairman



Metering

Speaking on metermen's responsibility to gas industry is P. S. Anderson, Michigan Consolidated Gas; at his left is J. T. Stine, Metering subcommittee chairman

entire country.

This approach to operating problems, initiated by the Section in 1953, is designed to keep operators abreast with current developments by presenting examples of good practices within the industry. The task group headed by Mr. Anuskiewicz is one of several sub-groups doing similar work in various fields.

After presenting a wealth of data and illustrations demonstrating many methods of preventing overpressure, Mr. Anuskiewicz summed up by stating, "Through the very nature of the assignment there is nothing new or unusual in our findings except that a few of the applications may be new to some of us

—and may be applicable to our own activities.

"If that should be the case—or if the report is of aid in setting up a program, or if it even confirms the adequacy of a program already completed or underway—the group will feel that it has fulfilled its assignment."

How the mental interest of meter repairmen can be stimulated through an incentive wage plan and thus make it economically feasible for a gas company to retain its own repair service was the subject of a paper given by George K. Bachmann, Public Service Electric and Gas Company.

Management should provide the best

material handling and process facilities possible in order to stimulate cooperation of workmen for maximum production effort, Mr. Bachmann said. He warned that under an incentive plan an effective quality control must also be planned.

Setting the proper wage incentive requires job description, job evaluation, time study, incentive allowance and clerical system. Mr. Bachmann advocated that these steps be taken, for in addition to a direct financial saving on meter repairs, other benefits accrue to a gas company through maintaining its own meter repair shop.

The Thursday morning session con-



Corrosion

Grouped around instrument display are panelists J. J. Wise, I. E. Davis, J. O. Mandley, F. W. Ringer (subcommittee chairman), and M. C. Miller

Distribution Design and Development

Luncheon meeting speakers relax before symposium begins. Fourth and 5th from left are E. F. Trunk and D. W. True, subcommittee chairman and vice-chairman



cluded with a panel discussion of the importance of using the service department to improve customer relations. W. Weir Gillis acted as moderator during the lively discussion.

Held simultaneously with the Thursday general session was a corrosion session, presided over by C. W. Beggs, chairman, Corrosion Committee. Solution of an interesting problem in attaching anodes to a pipeline with a minimum damage to paving and obstruction of traffic on an arterial street was presented by S. C. Jones, Cincinnati Gas and Electric Company. The task of installing 150 anodes on a 3,000-foot section of 12-inch bare steel main was accomplished

through six-inch core holes.

Causes of ferrous pipe corrosion were sought through a survey of 28 companies, conducted by the Operating Section's Corrosion Committee. The results were reported by Frank E. Kulman, Consolidated Edison Company of New York.

Replies indicated that approximately 65 percent of all corrosion leaks are caused by corrosive soil conditions. Dissimilar metals and stray current electrolysis account for 20 percent and 15 percent, respectively, of all corrosion.

Mr. Kulman pointed out that the soil redox probe represents an important tool for corrosion engineers and reported that an A. G. A. project is seeking to develop

the probe into a rugged field tool.

Other topics discussed at the meeting included the economics of a paint survey and a report on surface potential measurements.

No general session was held Friday morning. Instead, open sessions were held by the subcommittees on Construction and Maintenance, and Metering.

The Conference ended its sessions with a meeting Friday afternoon on plastic pipe standards. Bert S. Montell reported on the activities of The Society of the Plastics Industry in relation to pipelines and a display of plastic pipe fittings was shown. On hand were representatives of manufacturers to answer questions from the delegates. John F. Fugazzi, vice-chairman of the Subcommittee on Plastic Pipe Standards, moderated a panel discussion on the use of plastics in the gas industry.

A report on the activities of the subcommittee was made by Mr. Fugazzi. It appears elsewhere in this issue.

Automotive and mobile equipment sessions

Six automotive and mobile equipment sessions were held during the four-day Conference, with delegates from both gas and electric utilities in attendance. These meetings are a joint activity of American Gas Association and Edison Electric Institute. In charge were S. M. Foeller, Michigan Consolidated Gas Co., and A. E. Dible, Equitable Gas Co., chairman and vice-chairman of the A. G. A. Automotive and Mobile Equipment Committee; and Randolph Whitfield, Georgia Power Co., and R. E. Hamel, Cleveland Electric Illuminating Co., chairman and vice-chairman of the EEI Transportation Committee.

The program in the main was devoted to examining and discussing equipment and materials in the transportation field, particularly as applied to the use of trucks and other mobile equipment by utilities. Presentations on a wide and varied range of subjects were made. In many cases, manufacturers' representatives presented the results of research

- Many of the papers presented at the A. G. A. Distribution, Motor Vehicles and Corrosion Conference are available in printed form. A check list will be mailed to Operating Section members shortly.

Report on plastic pipe standards

By GUY CORFIELD

Chairman, A. G. A. Subcommittee on Plastic Pipe Standards

The last report of the A. G. A. Subcommittee on Plastic Pipe Standards was made in April, 1954. At that time it appeared that future activities of the subcommittee would be contingent on development, by the plastics industry, of physical and chemical data on specific

types and formulas of plastic material recommended for gas industry use. The Society of the Plastics Industry agreed that they would, through their own membership and through sponsored research at Battelle Memorial Institute, proceed with the development of such data.

At a meeting of the subcommittee on December 2, 1954, a special committee of the Thermoplastic Pipe Division of The Society of the Plastics Industry made the following recommendations:

Recommendation No. 1: The thermoplastic materials, Polyvinyl Chloride, Styrene-Acrylonitrile, and Butyrate, specifically identified below in Recommendation No. 2, are the only thermoplastic materials currently recommended for natural gas distribution pipe.

Recommendation No. 2: Working stress (tensile constants) for various plastic materials for use at 100°F. or less. To be applied in Barlow's or Lamé's Burst Formula.

Normal Impact PVC—Type I (Marvinol NR-7045 or NR-7020, Exon 1410 or Geon 8750)	1200 psi
High Impact PVC—Type II (Marvinol RX-234-13 or RX-234-23, or Geon 8700A or 8700)	1000 psi
Styrene-Acrylonitrile Resin Rubber Blend (B or B-E Grade)	1000 psi
Butyrate (formulas MH Flow—435, 205 and 460 in clear or black—265 in black)	700 psi

Recommendation No. 3: Minimum wall thickness for various types of plastic pipe for gas distribution at pressures not exceeding 60 lbs. psi and temperatures up to 100°F. For pull through service in existing metal lines.

Nominal Size	O.D.	Wall Thickness
1/2	.625	All sizes in all materials to have a wall thickness .062 except 1 3/4 inch Butyrate will be .080.
3/4	.875	
1	1.125	
1 1/4	1.375	
1 3/4	1.875	

NOTE: Butyrate pipe may be coiled in this application if desired. Other materials should be furnished in straight lengths only.

For new services and mains

Nominal Size	IPS O.D.	Styrene Acrylonitrile and High Impact PVC		Cellulose Acetate Butyrate
		(Type 2)	(Type 1)	
1/2	.840	.090	.090	.090
3/4	1.050	.090	.090	.090
1	1.315	.090	.090	.090
1 1/4	1.660	.090	.090	.090
1 1/2	1.900	.090	.090	.090
2	2.375	.090	.090	.110
2 1/2	2.875	.110	.100	.135
3	3.500	.125	.120	.160
4	4.500	.155	.145	.205
5	5.563	.190	.170	.250
6	6.625	.220	.200	.300

These three recommendations were approved by the subcommittee and submitted to the Distribution Committee. The use of the formulas to determine

burst strength was recommended by the Subcommittee at an earlier date.

The Reinforced Plastic Committee of
(Continued on page 50)

conducted by their own companies; in other cases, utility men reported on their own experiences.

Among subjects discussed were motor oils and fuels, lubrication problems, new developments in tires and batteries, and an evaluation of automatic transmissions for truck work. Other subjects included wire rope, foldover derricks, the pros and cons of paper and cotton filters, airless paint spray and a re-evaluation of undercoating.

The advantages and disadvantages of vehicle leasing were discussed by Mr. Dible and Mr. Hamel. Rotary vs piston air compressors were also the subject of two pro-and-con papers.

Activities of subcommittees working on transportation subjects were reported on during the final session on Friday. K. G. Scantling, Duquesne Light Co., reported on work being done on driver training and safe operating practices; W. B. Streitle, Rochester Gas and Electric Corp., reported on maintenance practices and facilities; and M. C. Alves, Union Electric Company of Missouri, reported on vehicle selection, utilization and retirement.

Luncheon conferences

• Open and informal discussion is sought at these Operating Section luncheon conferences, which for the most part are "off the record". The brief summaries below are presented through the cooperation of the presiding officers at the various meetings—Editor.

Construction and maintenance

The luncheon conference on Wednesday opened with a discussion of construction and maintenance work organization led by a five-man panel. Moderator was Calvin A. Brown, Rochester Gas and Electric Corporation.

The panel was representative of large and small companies in widely separated geographic areas. The functions of these companies were described as to their size and type of property, scope of work performed, general supervision, manpower and equipment used. The speakers outlined the general methods of their respective companies and how the work was planned and organized.

An unusual method of gas shut-off on a 24-inch main was described in a
(Continued on page 54)

Lay plans for annual two-day New York-New Jersey Regional Sales Conference

New York scene of sales conference

Plans for the annual New York-New Jersey Regional Gas Sales Conference, to be held at the Commodore Hotel, New York City, May 23-24, have been completed.

This year the Conference will feature nationally-known speakers who will discuss the many diversified and important residential sales activities. Several new features have been added; namely, a special Conference Luncheon to be held each afternoon, and a series of round table discussions conducted by well-qualified gas utility company and manufacturer representatives.

The Monday morning session will be under the direction of Henry Rohrs, vice-president and treasurer of the Elizabethtown Consolidated Gas Co., Elizabeth, N. J., and chairman of the Council. In view of the importance of the gas refrigeration and year-round air conditioning load to the gas industry, Duncan C. Menzies, president of Servel Inc., and Louis Ruthenburg, chairman of the board, will discuss both of these important subjects under the title, "Operation Gas Load".

Recognizing the importance of market studies and market research as a key to more gas appliance sales, the Council has arranged for a presentation on this subject by Edward R. Martin, director of marketing and statistics, Gas Appliance Manufacturers Association, under the title, "Know Your Markets—or No Sales".

To the end of dramatizing the many new features and developments in today's modern gas range, H. P. More-

house, assistant sales manager—gas, Public Service Electric & Gas Co., Newark, N. J., will discuss "Panorama of Progress".

The Monday afternoon session will consist of a series of six panel discussions, each to run one hour. Three will begin at 2:00 p.m. and the remaining three will begin at 3:00 p.m. All those attending the Conference are urged to



Presiding at opening session will be Henry Rohrs, Elizabethtown Consolidated Gas Co., Elizabeth, N. J.

attend these discussions, to ask questions, take notes and discuss their own company's activities as they affect the subject being discussed.

The panel on "Selling the Built-in Gas Range" will be handled by E. W. Westland, manager of built-in range sales, Caloric Appliance Corp., Philadelphia, Pennsylvania. The panel on "Gas

House Heating" will be led by Frank Powers, district sales manager, Consolidated Edison of New York, Inc. George F. Duggan, supervisor, domestic and commercial sales, The East Ohio Gas Co., Cleveland, Ohio, leads a panel on "Gas Incineration"; "Promotion" will be discussed by W. W. Selzer, director of business promotion, Columbia Gas System Service Corp., New York; and "Selling Through Dealers" will be covered by Martin M. Gibbons, manager of dealer relations, The Brooklyn Union Gas Co., Brooklyn, N. Y. The A. G. A. "New Freedom Gas Kitchen and Laundry Program" will be presented by Charles R. Bowen, manager of New Freedom Gas Kitchen and Laundry Bureau, A. G. A.

Tuesday's session will be under the chairmanship of A. J. Hartmann of Con Edison. The first presentation will stress the importance of public relations as a sales tool, and the speaker will be J. E. Drew, public relations director, Lever Brothers, New York.

Promotion and sale of automatic gas water heaters will be discussed by William T. Briggs, vice-president and eastern sales manager, heater and tank division, John Wood Co., Conshohocken, Pa., under the title "What Are We Waiting For?"

One of the features of the Conference will be an address by Harry Bowser, director of sales education, L. Bamberger & Co., Newark, N. J., entitled "The Little Things that Make the Sale". The Tuesday morning session will be completed with the showing of a color mo-

(Continued on page 53)

Industry news

Homemaker Satisfaction keynotes GAMA Conference

RANGE MANUFACTURERS should make sure they are producing automatic *allies*, not mechanical *rivals* for American homemakers! Women take pride in, and deserve credit for creative cooking and baking, thus want no part of a range that claims to "do it all", said Dr. Albert Shepard, executive vice-president, Institute for Motivational Research. Dr. Shepard, a psychologist, went on to say that the range is not just a machine—it represents things like prestige, personality and power to a woman, very much as a car does to a man. To the woman, the range is a nostalgic symbol of hearth and home and for this reason, Dr. Shepard thinks that manufacturers are not

satisfying consumer demand by making ranges that are broken up and scattered about the room in walls and counter tops.

Dr. Shepard expounded his ideas before the Sixth Annual Gas Appliance Manufacturers Association Automatic Gas Range Conference. The conference, held in New York City's Hotel Pierre on April 14, afforded about 250 editors and writers, manufacturers representatives and others in the appliance field an opportunity to learn what the American public is seeking and to see how the gas industry is answering its desires. The one-day meeting was opened by F. A. Kaiser, chairman of the GAMA Range Conference Committee and president of the Detroit-Michigan Stove Company.

Mr. and Mrs. William C. Morhard of Falls Church, Va., members of the Washington, D. C., Chapter of the Society for the Advancement of Management, told of their attempts to bring time and labor-saving principles into their home. The Morhards, who take an active part in an SAM round-table in their neighborhood, discussed ways and means they have discovered to live more effectively—and have more time and money for fun—by applying scientific industrial management to home problems.

Edwin L. Hall, director of American Gas Association Laboratories, announced that within a relatively short time, fully automatic ignition will be required of every model bearing the A. G. A. blue seal of approval. Mr. Hall also announced that after January 1, 1958, all valves will turn off in a clockwise direction. Mr. Hall cited these steps as examples of the industry's job of self-improvement, made possible by manufacturers' and Laboratories' research.

Range manufacturers take note: color is coming into the kitchen! Today's homemaker-consumer is no longer obsessed with the turn-

of-the-century idea that a kitchen must look like a hospital to be sanitary. Thus, it need not be stark white and chrome monotony, but an "aesthetic banquet of delicious color." Joseph Gaugler, one of the country's leading color experts, and director of American Color Trends, in his talk "This Color Question" went on to explain that today's trend is toward colors inspired by Impressionist painters where there is a gentle transition from hue to hue. Mr. Gaugler expressed his opinion that matching colors are "a thing of the static past". He warned that it is most important for manufacturers to spot color trends rather than to haphazardly pick a seemingly striking, unique shade.

A question-and-answer period following the talks gave the audience a chance to participate in the program. Range manufacturers' representatives as well as the speakers answered questions. The period was moderated by the master of ceremonies, F. A. Kaiser.

E. Carl Sorby, introducing the "Cook's Tour of Automatic Ranges" told of the many new features to look for at the comprehensive display set up in the hotel for the audience to examine first hand. And many new features there were—hypodermic pilots that give off only 50 or 60 Btu; thermostatic controlled top burners; new burner arrangements; rotisseries; oven time and temperature controls; new colors ranging from light touches on splash boards, handles and trim to all-porcelain coppertone finish.

The Cook's Tour was followed by a luncheon, during which the conference was adjourned. Serving on the 1955 Conference Committee, in addition to Chairman Kaiser were: Wendell C. Davis, Cribben & Sexton Co., Chicago; Cecil M. Dunn, Magic Chef, Inc., St. Louis; S. B. Rymer, Jr., Dixie Products, Inc., Cleveland, Tenn.; and Alan P. Tappan, The Tappan Stove Co., Mansfield, Ohio.

Propose expansion

PENDING approval from the California Public Utilities Commission, the California portion of the Texas "Biggest Inch" pipeline, which brings natural gas from New Mexico and Texas fields to southern California, will be expanded.

Southern Counties Gas Company has requested permission from the commission to construct 31.5 miles of 30-inch pipeline between Cactus City and Desert Center in Riverside county.

The \$2,500,000 project would complete "looping" of the California-Texas pipeline system along the entire 210-mile stretch from the Colorado River to Los Angeles, thereby further insuring continuity of gas service to the Southland.

The dollar investment for the project will bring Southern Counties Gas Co.'s budget to more than \$16,000,000, the largest annual money outlay in the utility's 44-year history.

The Texas pipeline system in 1955 will provide about 65 percent of the primary gas supply of Southern Counties and Southern California gas companies. The utilities own the line jointly. Construction should require about 60 days.

Utility celebrates 200,000th meter



Latest style in gold plating is meter installed in home of Mr. and Mrs. Gordon Sharpless of Anniston. Lucky couple also wins choice of any major gas appliance, in celebration of 200,000th meter on Alabama Gas Company lines. Presenting award are E. H. Miller (l.), manager, and J. Chenery (r.), vice-president of sales, Alabama Gas Co. American Meter Company supplied installation for occasion.

Ayer elected to succeed Wright at NEGA annual meeting

HAROLD E. AYER, vice-president in charge of operations, Lynn Gas & Electric Co., has been elected president of the New England Gas Association to succeed Roy E. Wright, director of gas sales, NEGEA Service Corp., Cambridge. Other officers elected at the New England Gas Association annual meeting, held on March 24 and 25 in Boston are Fred H. Faulstich, vice-president, Springfield Gas Light Co., first vice-president; Edgar G. Rhodes, president and general manager, The New Britain Gas Light Co., second vice-president; Otto Price, vice-president, Boston Consolidated Gas Co., treasurer, and Clark Belden, managing director, The New England Gas Association, Boston, clerk.

Keynote speaker of the annual meeting was F. M. Banks, president, American Gas Association and president, Southern California Gas Co., Los Angeles, who spoke on "This I Believe". Mr. Banks stressed the need for unity within the gas industry to combat competition. He spoke of the importance of unity also in regard to the controversial Supreme Court decision in the Phillips Petroleum Company case. He discussed the Gas Industry Development Program, the PAR Program, the Mrs. America contest, the accident prevention program, the new public relations program, and other A. G. A.-sponsored activities. Other speakers at the opening session were Clark Belden, who delivered a report on "The Association's Year", and Dr. Kenneth McFarland, educational lecturer and consultant, Topeka, Kansas, whose topic was "Lamp Lighters".

Leading industry personalities who delivered speeches at the NEGA meeting were William B. Hewson, vice-president, The Brooklyn Union Gas Co., Brooklyn, N. Y., who asked "Are We Taking a Sales Siesta"; Roy E. Wright, who stressed the fact that "Acceptance Is Everyone's Job"; and T. T. Arden, president of Gas Appliance Manufacturers Association, and executive vice-president Robertshaw-Fulton Controls Co., Long Beach, Calif., who advised the audience to "Go and Do Likewise". Dr. Arthur Secord, director of community service and associate professor of speech, Brooklyn College, New



Elected to serve as officers of New England Gas Association during 1955-1956 are (seated, l. to r.): H. E. Ayer, Lynn Gas & Electric Co., president; Roy E. Wright, NEGEA Service Corp., Cambridge, retiring president; F. H. Faulstich, Springfield Gas Light Co., first vice-president. Standing, l. to r.: Clark Belden, NEGA, clerk; Edgar G. Rhodes, The New Britain Gas Light Co., second vice-president; Otto Price, Boston Consolidated Gas Co., treasurer; H. C. Moore, Jr., NEGEA Service Corp., assistant treasurer

York, delivered an inspirational address entitled "Painting Haystacks".

Two panels—one on operating problems and the other on sales problems, were high points of the three-day meeting. John A. Weiser, executive vice-president, The Newport Gas Light Co., led the panel on operating matters, while J. J. Quinn, vice-president was chairman of the sales panel.

This year, two NEGA Accomplishment Awards were presented, in recognition of especially valuable service to the association. Herman Koester, Jr., vice-president, W. Wirt Young & Associates, Inc., Wellesley Hills, Mass., and W. C. Wolff, manager, New England office, Affiliated Gas Equipment Inc., Bryant Heater Div., Cambridge, were honored for their constructive contributions to NEGA during the last 10

years. Each was presented with an embossed fountain pen and pencil set.

Charles V. McCaffrey, superintendent of gas production, The Blackstone Valley Gas & Electric Co., Pawtucket, won the first prize of \$75 in the essay contest on the subject "What NEGA Means to Me and Thus to My Company". Second prize winner was Eugene J. Ivers, assistant superintendent of distribution, Fall River Gas Works Co.; third prize winner was Lester Gurney III, local representative, The Narragansett Electric Co., Warren, Rhode Island. Honorable mentions went to W. Raymond Ahearn, The Connecticut Light and Power Co., Waterbury; Lawton P. Bourn, Gas Service Co., Inc., Keene, N. H.; Harry Eisenberg, The Worcester Gas Light Co., Worcester, Mass.; Herbert C. Jones, The New England Electric System Gas Div., Malden.

Consolidated Gas joins Cascade Natural Gas Corporation

THE MERGER of Consolidated Gas Company into Cascade Natural Gas Corp., Seattle, was approved recently by the Washington Public Service Commission. Cascade Natural Gas Corporation has purchased all stock

of the Consolidated Gas Co. (which distributes manufactured gas in Sunnyside, Grandview, Granger, Toppenish, Prosser and Zillah.

Stewart Matthews, president of Cascade, reports that market studies have been completed

and that communities are scheduled to share in the company's \$12,000,000 system-wide expansion program. Mr. Matthews stated that the merger should provide industrial opportunities for Yakima Valley in the natural gas era.

Pennsylvania leads in natural gas underground reserves

PENNSYLVANIA leads all states in the volume of natural gas in underground pools, the Pennsylvania Natural Gas Men's Association reported recently. Over 250 billion cubic feet of natural gas in these pools represents a net increase in reserves of approximately 45 billion for the year 1954.

Total stored reserves represent an outlay of \$75 million by gas utilities in Pennsylvania for imported Southwest gas alone. Another \$50

million has been invested in storage wells, compressor stations, and pipelines. Natural gas stored underground in produced-out, but now reconditioned gas fields in the state represented one-third of the state's total known reserves of last year.

New discoveries of natural gas and extensions and revisions of proved reserves in active gas fields in Pennsylvania totalled 93,359,000,000 cubic feet during 1954, the PNGMA

report showed. Total output was more than 50 percent greater than in 1953, due in part to withdrawals from the Driftwood and Benezette gas fields largely under state forest lands in north central Pennsylvania.

Royalties paid to the state for gas production from state lands in 1954 amounted to more than \$6,000,000,000 last year, or nearly twice the total royalties for the previous three years combined.

Industrial expansion characterizes 1954 annual reports

A BRIEF GLANCE through annual reports of utilities and transmission companies substantiates the fact that 1954 was a year of fiscal expansion for the industry. Net income increased 14 percent over 1953.

Emphasis is great on long-term views, as indicated by the work done in public relations and research. Several companies mention research projects which were carried out in conjunction with the PAR Program. Northern Indiana Public Service Company notes that American Gas Association educational materials have been provided to schools in its district, and Consumers Power Company mentions its Action City Demonstration program in Lansing, Michigan.

The following is a brief summary of annual report highlights.

- **American Natural Gas Co., New York,** reports consolidated earnings of \$12,952,840, a 12 percent increase over 1953. Future plans include construction of new pipeline by American Louisiana Pipe Line Co., a subsidiary firm.

- **Arizona Public Service Company** reports total 1954 revenue of \$34,597,000, of which \$8,587,000 was derived from natural gas sales. Net income was \$4,589,000 as compared with \$3,798,000 the year before. New customers numbered 16,511, bringing the total to 269,279. Retained earnings were \$1,612,000.

- **Arkansas Louisiana Gas Company** announces that net earnings declined in 1954, despite an increase in total sales and number of customers. Net income was \$1,950,000 or 51 cents per share of common stock. The firm invested \$10,664,000 during 1954 to provide additional service facilities and to develop long-term gas supplies. Total gas sold and delivered under transportation agreements was 191 billion cubic feet.

- **Brooklyn Union Gas Company's** change from manufactured to natural gas distribution has resulted in substantial sales growth and lowered unit cost. Income for last year was \$4,649,700, compared with \$3,738,300 in 1953. Earnings on common stock were \$2.50 per share. Revenue from gas sales increased by \$5,340,403, with higher residential usage accounting for over \$3,300,000.

- **Citizens Gas and Coke Utility, Indianapolis,** reports operating revenues of \$8,953,846, with a net operating income of \$3,097,718. Gas provided 52.3 percent of revenues, with by-products providing 47 percent. Current and accrued assets total \$6,680,142, and total retained earnings, \$28,900,340.

- **The Columbia Gas System, Inc. and subsidiaries** report a total revenue of \$260,365,000 for 1954, with \$124,831,000 paid for purchased gas less net gas placed in storage. Consolidated net income was \$19,550,000. While earnings increased, they were said to be still below a satisfactory level, amounting to a 5.3 percent return on consolidated capital.

- **Consolidated Edison Company of New York, Inc.** annual report indicates that common stock earned \$2.98 per share, with

operating income up \$3,300,000. Net income, after deductions, was up \$710,746. Construction expenditures totaled \$84,000,000, of which \$6,000,000 was spent on gas production, distribution and storage. Gas sales increased to \$72,694,814.

- **Consumers Power Company, Jackson, Mich.,** received \$54,061,000 in income from gas sales, a 14 percent increase over 1953. Gas customers increased six percent to 395,500, while gas space heating customers increased 12.5 percent to 170,600. Operating expenses totaled \$138,355,200.

- **Delaware Power & Light Company** reports level of 1954 operating revenues to be \$30,577,435. Total operating expenses were \$24,585,416, while net income was \$4,663,311. There were 1,860,160 shares of common stock outstanding, each share earning \$2.08, as compared with \$1.84 of the previous year.

- **The Gas Service Co., Kansas City, Mo.,** announces a total of 497,152 customers at the end of 1954. Operating revenues were \$51,097,540, with net income increased to \$2,792,638.

- **New England Gas and Electric Association** reports a total revenue of \$37,298,378. The over-all gas sales revenues increased 15 percent, and sales volume 21 percent over 1953. Net income was \$3,034,452. A three-year construction program being planned provides for expenditures of approximately \$22,300,000 by subsidiaries.

- **Northern Indiana Public Service Company** discloses net income for 1954 to be \$10,139,028, or \$2.45 per share of common stock outstanding. Operating revenues increased to \$68,201,000, along with an increase in operating expenses. The firm sold 315,961 shares of common stock last year to finance its planned construction program. The two-year program provides for \$5,200,000 to be spent for gas distribution facilities.

- **Northern Natural Gas Co., Omaha,** reports gas sales for 1954 at approximately 273,000,000 cubic feet, at an operating revenue of \$89,239,909. Net income was \$10,102,392, with \$57,067,644 in gross additions to property during the year. Stockholders received \$1.95 per common share, \$5.50 per preferred share. Operating revenues, sales volume were largest in company history.

- **Rochester Gas and Electric Corporation** reports gas revenue of \$16,143,853, a \$1,863,564 increase over 1953. Gross construction expenditures were \$13,532,210, and number of gas customers 138,707. Gas revenues were almost one-third of company's total revenues.

- **Rockland Light and Power Co., Nyack, N. Y.,** reports a net income of \$1,349,906, with total operating revenues at an all-time high of \$13,591,092. Gas operating revenues were \$4,165,048, an increase of \$805,828 over the year before. Number of gas customers increased 2,030, to total 30,704. Net income was \$1,660,717.

- **San Diego Gas & Electric Company** notes that net income for 1954 increased to \$5,162,726, while gross capital expenditures in-

creased to \$29,492,600. Gas sales accounted for over one-third of the firm's revenue, with gas customers at the end of the year numbering 74,444. Earnings were \$1.24 per share of common stock.

- **Southern Natural Gas Co., Birmingham, Ala.,** reports a substantial increase in volume of sales and revenues for 1954, with a proportionate increase in operating expenses and income. Net income, somewhat lower than in the preceding year, was \$6,497,643. Operating revenues increased by 22 percent.

- **Tennessee Gas Transmission Company** discloses operating revenues of \$142,995,640, a seven percent increase over 1953, representing increased gas deliveries. Net income for the year was \$22,075,520. Securities totalling \$225,000,000 were sold to the public, and an enlargement of the system was achieved through completion of an \$85,000,000 pipeline construction program. The firm's first advertising campaign featured institutional advertisements stressing the importance of gas in home and industry.

- **Texas Eastern Transmission Corporation** reports a consolidated net income of \$12,986,145, with natural gas sales operating revenues at \$1,033,862. Earnings per share of common stock rose from \$1.33 to \$1.70.

- **Texas Gas Transmission Corporation** submits an operating revenue of \$68,156,000, net income of \$5,031,000 and net additions to property of \$4,085,000. Earnings per share of common stock were \$1.65, with 2,708,376 such shares outstanding. Gas sales were approximately 270,000,000,000 cubic feet, an increase of 14,000,000,000 over 1953. A new issue of preferred stock was applied to retirement of all outstanding bank loans, resulting in an improved capital structure.

- **Transcontinental Gas Pipe Line Corp., Houston, Texas,** indicates operating revenues of \$63,283,384, a substantial increase over 1953. Net income rose from \$7,774,424 to \$8,857,875. Average daily sales of natural gas set a new high record of 543,083,000 cubic feet. The firm concluded negotiations for \$60,000,000 credit agreement to finance a portion of the 1955 construction program.

- **United Gas Corporation, Shreveport, La.,** reports a sales increase of 55,000,000,000 cubic feet over 1953. Consolidated operating revenues for 1954 stand at \$215,187,697, with natural gas revenues at \$171,840,923. Total operating expenses were \$175,261,695, for a net income of \$26,749,356. Stockholders numbered 46,167, and received \$2.16 per share.

- **United Gas Improvement Co., Philadelphia,** reports net income applicable to common stock amounted to \$2.10 per share, with dividends of \$1.80 per share. Gross operating revenues excluding Philadelphia Gas Works were \$23,281,907, a 5.8 percent increase over 1953. Gas revenues were \$16,643,631, with \$4,728,220 total construction expenditures. The company voluntarily reduced certain gas rates, resulting in an increase in sales. Operating income of the company was \$3,681,991.

Gas, coal industries back Pennsylvania storage bill

THE FIRST Pennsylvania legislative proposals on gas storage to carry the full support of the coal and gas industries, plus that of the United Mine Workers of America, have been introduced at Harrisburg by Robert F. Kent, Republican state representative, and George J. Sarraf, Democratic state representative. The bills reflect the efforts of technical specialists in both industries over the past 18 months to develop the basis for such support.

House Bill 700 would regulate underground gas storage in the vicinity of coal mines and regulate the drilling and plugging of wells. A companion bill, HB 701, proposes to change the name of the Department of Mines to the Department of Mines and Mineral Industries. Meanwhile, the main bill would establish an Oil & Gas Division within the Department of Mines and Mineral Industries with a deputy secretary to administer the act.

Representative Kent, who sponsored the 1953 bill to enact state regulation of underground gas storage, said, "The coal and gas industries, and the United Mine Workers of America, are to be complimented for their cooperation in developing the basis of this legislation. During the inter-industry disagreement on the 1953 bill, I suggested that the two

industries get together and hammer out their differences. Well, they have done it and I know it took lots of work, with unselfish motivation.

"As a result of their endeavors, we can enact a method of regulation that insures maximum safety from the hazards of underground gas storage without restricting the opportunities of the gas and coal industries for progress and growth. Moreover, there will be benefits from uniform regulation of the drilling and plugging of wells, and from public recording of the exact location of all future oil and gas wells drilled in Pennsylvania and of the boundaries of coal mining and gas storage operations.

"Unique feature of the legislation is its emphasis upon the conference method for reaching agreement between conflicting interests. The soundness of this approach to the solution of the safety problem is attested by the fact that it was the basis for similar legislation already enacted by West Virginia and expected to be introduced soon in Ohio, and in Kentucky when that legislature meets in 1956. Pennsylvania has pioneered a model solution of a modern problem."

The new bills established the responsibility of storage operators to prevent the escape of

stored gas into coal mines. While not responsible for act of God or third persons, storage operators assume responsibility for leakage from uncharted wells. Thus, a primary requirement is that storage operators, if operating under or within 2,000 feet of active coal mining operations, must satisfy the Oil & Gas Division that adequate measures were taken to locate uncharted wells and that all wells were properly checked and reconditioned.

The testing of a depleted gas sand to see if it is suitable for storage is given the special protection of detailed control by the state regulatory division.

Benefits granted to storage operators include a limited right of eminent domain for storage pool development, provided the storage operator has acquired rights to at least 75 percent of a gas sand that is at least 80 percent depleted. Also, storage operators under unmined coal reserves get a long period of warning before coal mining can begin and the storage operation is placed under the provisions of the act.

The 1953 attempt to set limits on gas pressures allowable in storage pools was abandoned, except as might be set to govern testing operations.

Wisconsin company honors PR-conscious employees

EMPLOYEES of Wisconsin Public Service Corporation who have contributed the most to the improvement of public relations through exceptional service and courtesy to customers, were honored recently at a meeting of company officials held in Green Bay.

The annual C. R. Phenicie Public Relations Award trophy, a \$50 Savings Bond and \$100 in cash was awarded to Howard Johnson, commercial representative. Second place win-

ner was Clarence Schmeiser, serviceman, who received a Certificate of Merit and a \$50 bond, and a similar award was made to William Pfeil, senior clerk, the third place winner.

Six other employees who received consideration in the final judging were awarded Certificates of Merit. They were Harry Zwicky, serviceman; Leonard Baumgart, serviceman; Claude Carrington, service man; Curt Wedepohl, salesman; Henry Van Langendon,

serviceman; and Ralph Garland, meterman.

The practice of rewarding employees for exceptional service to customers was established in February, 1952, by C. R. Phenicie, Green Bay, retired executive of Public Service, who was one of the first in the industry to recognize the value of sound public relations practices. The award has been enlarged upon following its initial success and has received much national publicity.

New York promotion campaign features sales package

A SPECIALLY-PRICED sales package, a film on the advantages of gas house heating, and a promotion program tailored to appeal to a key opinion-forming consumer group, the housewives of the community, are featured in Consolidated Edison Company's 1955 residential gas space heating campaign which began last month.

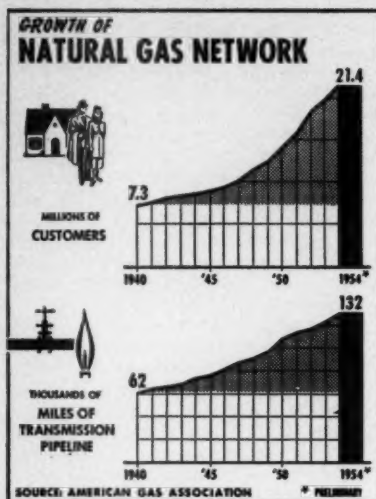
Consolidated Edison's campaign this year is directed to owners of one and two-family houses in the system's service area. Principal targets are about 200,000 homes in New York's boroughs of Queens and the Bronx and Westchester that are now heated by coal or oil.

During the 1954 campaign Consolidated Edison gained more than 7,600 new gas house heating customers. The appeal of gas house heating has been such that three out of four new homes in Westchester County are being heated by gas. The 1955 goal is to exceed last year's accomplishments and further develop the potential in existing homes that have not yet been converted.



A distinctive feature in Consolidated Edison's promotion campaign is sound color-film "Hey Charlie!" which depicts advantages of gas house heating. A Consolidated Edison "hostess" shows film to friends, answers questions, provides refreshments, at a "home party". Ladies attending provide sales leads

Customers triple



In last 15 years, natural gas customers have tripled. Today, 43 states are served by the nation's expanding pipeline system and proved gas reserves reached an all-time high of 211 trillion cubic feet at the beginning of 1954

A.G.A. announces publications during April

LISTED BELOW are publications released during April, and up to closing time of this issue of the MONTHLY. Information in parentheses indicates the audiences for which each publication is aimed.

LABORATORIES

- Literature Review and Design Studies of Gas Appliance Venting Systems Research Bulletin 68 (for utilities, manufacturers, code authorities) By Thomas E. Hampel and R. L. Stone, sponsored by A. G. A. Committee on Domestic Gas Research. Publication can be obtained from A. G. A. Laboratories, or Headquarters. \$2.50 per copy.

- Research in Pilot Burner Design and Performance—Second Bulletin—The Effect of Pilot Burner Assembly Materials and Gas Composition on Pilot Burner Outage at Elevated Temperatures—Research Bulletin 69 (for utilities and manufacturers) By James C. Griffiths, sponsored by A. G. A. Committee on Domestic Gas Research. Obtainable from A. G. A. Laboratories in Cleveland or Headquarters in New York, for one dollar per copy.

PAR

- PAR Briefs—January and February 1955

(for executives of gas companies) Sponsored by the PAR Committee, and available from A. G. A. Headquarters, free.

- PAR Annual Report 1954 (for executives of gas companies) Sponsored by the PAR Committee; available from A. G. A. free.

STATISTICS

- Monthly Bulletin of Utility Gas Sales—February 1955 (for gas companies, financial houses, etc.) Prepared by and available from the Bureau of Statistics, A. G. A. Headquarters, free.

- Employee Accident Experience of the Gas Utility and Pipeline Industry—1954 (for gas company safety directors) Prepared by the Accident Prevention Committee, and available from the Bureau of Statistics, free of charge.

RESIDENTIAL

- Comparative Total Costs of Gas and Electricity for Cooking and Water Heating in Residences—(for sales personnel) Factual data on equipment, installation, operating, and maintenance costs for gas and electric ranges and water heaters. Available from A. G. A. Headquarters, 40 cents per copy.

Laundry appliance show in Cincinnati draws homemakers

HOMEMAKERS in the Cincinnati area deluged the 1955 Home Laundry Appliance Promotion to watch dramatic demonstrations of the latest styles in laundry equipment.

Built around the theme of "Washday Follies", the booths displayed a variety of washing machines, dryers, ironers, and water heaters. The 18-day show was sponsored by The Cincinnati Gas & Electric Co., the Cincinnati Electrical Association, and the Cincinnati Times-Star.

In addition to publicizing the entire promotional activity, the Cincinnati Times-Star sponsored a "Washday Follies" contest. The newspaper published a coupon daily which entitled the reader to come to The Cincinnati Gas & Electric Company lobby to try to win one of the daily prizes. Over 42,000 coupons were presented in 12 days.

Participants presenting coupons received damp washcloths, which were later exchanged for dry ones from any of the 14 dryers in

operation for the game. At intervals, a contestant was signaled out, given a wet bath towel, and sent "outdoors" into the "rain" to hang up the dripping towel, thus demonstrating to the audience that "It's Folly to Hang Up Wash".

Toward the end of the show, the number of contestants appearing at the show almost doubled. This serves as evidence of the large potential market for the sale of modern home laundry appliances.

West Virginia schedules three-day short course

INITIAL plans have been completed for the 15th annual Appalachian Gas Measurement short course August 29-31 at West Virginia University, Morgantown, West Virginia.

The short course is attended annually by measurement and control engineers and other technical personnel representing the petroleum,

gas and chemical industries. Attendance is expected to surpass the approximate 700 of last year.

Subjects to be covered in the intensive three-day course will include the fundamentals of gas measurement and special sessions on domestic meters, orifice meters, large capacity

meters, automatic control instruments, planning and design of installations, pressure regulators and other related equipment. Moderated forums will be offered daily on specific phases of measurement and control.

Close to 100 industrial and technical experts will conduct class and lab sessions.

Release new Section 8 of code for pressure piping

A REVISED Section 8 on Gas Transmission and Distribution Piping, ASA B31.1 dealing with gas industry piping systems has just been released by the American Society of Mechanical Engineers. This Section was prepared by a 72-man committee, comprised of recognized experts, which devoted nearly three years of intensive effort to this tremendous project.

The new section of the American Standards code has been approved by the American Gas Association Board of Directors, the ASME Board of Codes and Standards and the American Standards Association. It establishes safe

standards in the design, fabrication and installation of gas transmission and distribution pipeline systems. It also covers the safety aspects of inspection, operation and maintenance of gas pipelines. Included also under the new Section of the Code on Pressure Piping are gas compressor stations, gas metering and regulating stations, gas mains and gas services up to the customer's gas meter.

Its requirements have been deemed by the national associations which have sponsored or approved the code as being more than adequate for safety under all conditions normally encountered in the gas industry.

Section 8 is concerned with safety of the general public, as well as with employee safety to the extent that such safety is affected by the basic design, the quality of materials and workmanship, and the requirements for testing and the maintenance of gas transmission and distribution facilities.

The subcommittee that prepared the new Section is continuing its work and is pursuing further studies on gas industry safety problems. It also will keep the Code in step with technological advances made in the industry.

Copies at \$2.50 each are available through ASME or A. G. A. Headquarters.

Pittsburgh utilities offer bonuses for built-in sales

NATURAL GAS companies serving the Greater Pittsburgh area are embarking on a promotional campaign to boost sales of built-in gas ranges. Joint sponsors of the program are the Equitable Gas Co., The Manufacturers Light and Heat Co., and The Peoples Natural Gas Company.

These firms outlined their three-fold bonus plan to 218 authorized manufacturers, distributors and dealers of kitchen cabinets at a recent dinner-display gathering in Pittsburgh.

The plan is as follows: each dealer adequately displaying and merchandising Matchless built-in ranges for the remainder of 1955 will receive \$50, while each dealer or salesman selling a Matchless built-in during April

or May will receive \$10 per sale.

Also, any individual advertising the built-ins in newspapers will receive a 25 percent cooperative allowance from the natural gas companies. In conjunction with this, the sponsors of the program will inaugurate a full-scale advertising program in newspapers, on radio, and television in their territory during April and May.

R. L. Conover, general promotion manager of Equitable Gas Co., acted as master of ceremonies at the promotional gathering which launched this campaign.

E. W. Wesland, manager of Built-In Range Sales for Caloric Range Corp., spoke on old-home modernization through the advantages

of built-in ranges, pointing out that they can be built into any type of material cabinet. He stressed the fact that they are functional, durable, economical, and most of all, that women want them.

Campaign details were presented by Edward Stevenson, field coordinator of The Peoples Natural Gas Company.

Following the dinner and speeches, the group moved to a display room where all five built-in gas ranges were on exhibition. While there, the advantages of the bonus plan were further discussed, with the result that some of the manufacturers, dealers, and distributors subscribed to the plan on the spot.

Manion main speaker at LPGA Chicago convention

DEAN Clarence Manion, former chairman of the Inter-Governmental Relations Commission, headed a list of speakers on Liquefied Petroleum Gas Association's convention program May 1-4 at the Conrad Hilton Hotel,

Chicago. The association's annual trade show, was largest in LPGA history.

For marketers, the convention highlight was the panel on operators' problems, presented by the Marketers Section of LPGA under the

chairmanship of R. L. Eppler, R. L. Eppler Butane Gas Service Inc., Tecumseh, Oklahoma. Speakers covered transfer gas and handling, insurance, dealer-supplier relations, and dealer-customer relations.

P. G. and E. celebrates three millionth meter on lines

PACIFIC GAS AND Electric Co., San Francisco, connected the three millionth customer meter to its lines recently. The distinction fell to Axel Andersen, a building maintenance engineer, his wife Lucy and their small daughter Carol Ann, 4, as they moved into their new home in Westlake, Daly City.

For Pacific Gas and Electric, it was a milestone of growth with California that was marked by special ceremony. A group of company officials, including Norman R. Suther-

land, vice-president and general manager, and Harry A. Lee, San Francisco division manager, visited the Andersens for a ceremonial installation of utility services in their new home.

Mrs. Andersen was presented with an orchid corsage and a gleaming new dish-washer, as tangible evidence of the importance attached by the company to the event. Mr. Lee personally set the gas meter, while Mr. Sutherland personally set the electric meter.

From the incorporation of P. G. and E.'s

earliest predecessor, the San Francisco Gas Company, in gold rush days of 1852, it took 76 years, until 1928, for the company to install its millionth customer meter. Nineteen years elapsed before the second millionth was set in 1947. In just eight years since then, booming California's growth has added the third million to P. G. and E. lines. The company has carried on America's biggest gas and electric expansion to keep ahead of the soaring demand for service.

Operating group aims to standardize gas meters

THE OPERATING Section's Metering Subcommittee has appointed a task group to study the possibility of standardizing gas meters. James Webb, Consolidated Edison Company of New York, Inc., vice-chairman of the subcommittee, acting under instructions from the American Gas Association Board of Directors, heads the task group which consists of representatives of six utilities and six meter manufacturers.

In a preliminary report, the task group states that standardization could result in improved performance with decreased initial and maintenance costs; ease of handling in quantity; interchangeable connections; and lower stock requirements. At the same time, the manufacturers would benefit by being able to concentrate on fewer sizes and types, thereby being able to maintain constant production lines throughout the year, instead of seasonal peak load production periods.

The task group plans to begin its work by surveying utilities to determine what capacity meter will meet the requirements of most utilities for domestic use; and what



Operating Section's task group on meter purchase specifications plans work program in Cincinnati. Seated third from left is J. T. Stine, New Orleans Public Service Inc., chairman, Metering Subcommittee, and third from right, James Webb, Consolidated Edison Co. of New York, subcommittee vice-chairman

parts now in the present design of a gas meter might be eliminated without affecting accuracy, reliability and economy.

Copies of the preliminary report are available from the Operating Section without charge.

Consolidated changes name to Baltimore Gas and Electric

STOCKHOLDERS of Consolidated Gas Electric Light and Power Company have approved a charter amendment changing firm's name to Baltimore Gas and Electric Co., at the annual meeting this month.

Charles P. Crane has been elected chairman of the board of directors, and re-elected president of the company. J. Pierre Bernard of Annapolis was named a director of the firm, to fill the vacancy created by the death of William Schmidt, Jr. All 14 incumbent directors have been re-elected.

In addition, Mason C. Albrittain was awarded the post of vice-president and general

sales manager. Re-elected officers are: J. Theodore Wolfe, executive vice-president; Herman L. Gruen, Austin E. Penn, A. L. Penningman and John H. Wolfe, vice-presidents. F. Edward Rugemer, treasurer, Otis F. Smith, secretary, Omar K. Boyd, assistant secretary and Edwin J. Knight, assistant treasurer will also maintain their former positions.

Mr. Crane started serving the company in 1910. He was elected vice-president in 1938, executive vice-president in 1946, president in 1950. During his 44 years of service the company's operating revenues have increased from less than five million dollars to over a hundred

million dollars, while its total assets rose over \$350,000,000.

Mr. Crane is a strong participant in the affairs of American Gas Association.

Mr. Albrittain entered the firm in 1924 as a junior sales representative after graduation from the University of Maryland school of engineering. In 1947 he was appointed assistant general manager of industrial and commercial sales and in 1949, manager. Three years later he was promoted to the post of general sales manager. In this position, Mr. Albrittain assumed direct responsibility for all sales and promotional activities.

Industry leaders open appeal for medical education fund

CALLING ON THE INDUSTRY for increased effort in 1955, the Committee of American Industry's Petroleum and Natural Gas Division has opened the appeal of the National Fund for Medical Education.

In a letter to members, the committee set forth as a threepoint goal: (1) renewal of all 1954 gifts and establishment of such gifts

on an annual basis; (2) contributions from all sponsor's companies, and (3) gifts from as many companies as possible in the petroleum and natural gas industry.

American Gas Association leaders who are also members of the Petroleum and Natural Gas Division are: F. M. Banks, president, Southern California Gas Co., Los Angeles,

and this year's president of A. G. A.; James C. Donnell II, chairman of the board, Mountain Fuel Supply Co., Findlay, Ohio; W. Alton Jones, chairman of the board, Cities Service Co., New York; and N. C. McGowen, president of United Gas Corp., Shreveport, and a member of the A. G. A. Advisory Council.

North Carolina college schedules gas technology courses

NORTH CAROLINA State College will conduct two four-week courses for men who desire technical training in the gas industry. Instructors Frank Seely and C. A. Plank will accent information about the various gases, their properties, behavior, problems of manufacture, and the maintenance, installation, and repair of gas appliances. Training will also stress safety practices, public re-

lations, and information on competitive fields.

The courses will be offered from June 13 to July 9, and July 18 to August 13. An additional course will be scheduled for August 15 to September 10 if there is sufficient demand. A \$100 tuition fee covers all text and laboratory materials. Maximum enrollment is 30 students, who will be accepted in order of registration.

In response to the request of industry, North Carolina State College's Department of Chemical Engineering and the College Extension division instituted the short courses in gas technology in 1953.

The advent of natural gas, expansion of bottled gas, and operation of manufactured gas properties in the southeast created the need for personnel training offered in this course.

Forsberg wins A.G.A. Safety Merit Award



Honored for working over a million man hours without a disabling injury, C. J. Forsberg (center), president of Wisconsin Power and Light Co., accepts A. G. A. Safety Merit Award. Presenting award at All-Employee Meeting are V. Uhlemeyer (l.), chief gas and water engineer, and E. Ravn, safety director

Favor built-ins

PROSPECTIVE home-owners in the New Jersey-Pennsylvania area are swiftly becoming aware of the increased kitchen glamour achieved through the built-in gas range. Builders in the territory report that requests for built-in ranges have sky-rocketed since the first evidence of public acceptance in 1953.

Philadelphia Gas Works, division of United Gas Improvement Co., reports that 97 percent of new homes in Philadelphia County have gas ranges; over 80 percent of all homes under construction by builders of 50 or more homes per year in the area have specifications for built-in ranges. This figure comprises over two-thirds of the homes being constructed in the county.

In the New Jersey area, a survey of builders who plan 50 or more homes this year was made by the Public Service Gas and Electric Company. Results indicate a phenomenal increase in home-owner interest in these functionally-designed built-ins. Buildings which were started in 1954 will accommodate 4,017 conventional gas ranges, and 608 built-ins, while buildings planned but not begun by the end of last year will hold 5,064 conventional gas ranges, 7,931 built-ins.

Highlights of cases before Federal Power Commission

Bureau of Statistics, American Gas Association

Rate Cases

● **Colorado-Wyoming Gas Company:** The FPC has permitted a wholesale natural gas rate increase by Colorado-Wyoming to take effect after the company reduced the amount sought from \$1.2 million to \$778 thousand annually. The higher rates were based principally on a proposed increase in the charges of its supplier, Colorado Interstate Gas Company. Colorado-Wyoming will be required to pass on to its customers any refunds Colorado Interstate is ordered to make upon conclusion of two pending rate proceedings still before the FPC, and to adjust its rates to reflect any reduction in the level of the supplier's rates. The proposed rates were determined on a six percent rate of return and will affect Colorado-Wyoming's three wholesale customers in those two states.

● **Michigan-Wisconsin Pipeline Company:** A proposed \$1.5 million annual wholesale gas rate increase by Michigan-Wisconsin was suspended by the FPC. Michigan-Wisconsin filed the higher rates to pass on increases in the cost of gas purchased from Phillips Petroleum Company. The Phillips increases have already been suspended by the FPC. The proposed higher rates would affect 16 utility customers which serve markets in Missouri, Iowa, Michigan and Wisconsin.

● **Natural Gas Pipeline Company of America:** The FPC permitted Natural Gas Pipeline Company to reduce the amount of a presently-suspended \$10.7 million annual increase by \$642 thousand, to reflect a decrease in the rates of its supplier. The reduced rates become effective subject to refund of any amounts subsequently disallowed by the FPC.

● **Olin Gas Transmission Corporation:** The FPC has suspended a proposed \$1.1 million, or 85.4 percent annual rate increase by Olin Gas Transmission. The increase would affect 14 of Olin's wholesale customers in Louisiana and Mississippi. Olin had claimed that the increases were necessary to reflect changes in its operations and the long deferred increases in cost which have occurred since its present rates were set by the FPC on the basis of 1941 operations. The Commission stated that Olin is relying principally upon the commodity value of company-produced gas delivered at a central

point to support the higher rate level, rather than upon changes in operations or cost of service. Olin also claimed a 6½ percent rate of return in support of its proposal.

● In other rate proceedings, the FPC permitted Sun Oil Company's proposed \$284 thousand and \$15 thousand annual rate increases to go into effect subject to refund. These higher rates affect Transcontinental Gas Pipe Line Corporation. Three other rate increases by independent producers, also affecting Transcontinental, and totaling \$222 thousand, were allowed to become effective subject to refund.

The FPC suspended a \$233 thousand favored nation gas rate increase by Sohio Petroleum Co., also affecting Transcontinental. Phillips Petroleum Company was permitted to put into effect, subject to refund, a \$151 thousand rate increase affecting Transcontinental, and two rate increases affecting Michigan-Wisconsin Pipeline Company totaling \$1.3 million annually.

The FPC suspended proposed rate increases of \$146 thousand by Gulf Refining Company and \$36 thousand by Crow Drilling Co.; both of these increases are of the periodic type and would affect United Gas Pipeline Company. In another action, the FPC suspended a proposed \$237 thousand increase by Orange Grove Oil and Gas Corporation and a proposed \$200 thousand annual rate increase by Associated Oil and Gas Co., both affecting Trunkline Gas Company. In additional proceedings, the FPC allowed during the month of March, 333 rate increases, totaling \$1.6 million per year, by independent natural gas producers. The 333 increases which were allowed to go into effect include 273 tax increases amounting to \$1.3 million annually, and 60 favored-nation and periodic increases totaling \$300 thousand per year.

Certificate Applications

● **Colorado Interstate Gas Company:** The company filed an application with the FPC asking for authority to relocate a pipeline, approved by the FPC last June 18 for the transportation of natural gas to be received from the proposed transmission system of Pacific Northwest Pipeline Corporation. The changes which Colorado Interstate is proposing include the construction of an additional 20 miles of 22-inch pipeline, and a reduction in the installed horsepower ca-

capacity at a proposed compressor station from 5,500 horsepower to 4,400 horsepower. The changes would result in a total increase in cost of approximately \$848 thousand, from \$23.3 million to \$24.1 million. The changes will enable Colorado Interstate to make available to the area between Cheyenne and Denver a gas supply sufficient to meet all foreseeable increases in market demand. Colorado Interstate also indicated that the extension of the line east to Cheyenne would further strengthen the supply position of all of its customers, and would supply gas for industrial customers in Cheyenne.

● **Transcontinental Gas Pipe Line Corporation:** The FPC issued orders authorizing Transcontinental to construct 360½ miles of 30 and 36-inch pipeline paralleling sections of Transcontinental's existing system. It also authorized a total of 10,500 horsepower in two new compressor stations, new purchase sales and meter stations and miscellaneous additions to existing stations. Total estimated cost of the project is \$48.2 million. The construction of new facilities is designed to increase natural gas deliveries by 93.2 million cubic feet per day. This will enable Transcontinental to increase deliveries to 36 existing customers and to serve six new wholesale and one industrial customer.

● **Wilcox Trend Gathering System, Inc.** has filed an application with the FPC for authorization to construct 16 miles of 16-inch pipeline; a new 2,000 horsepower compressor station to be located in Goliad County near Charco, Texas; and additional compression totaling 2,200 horsepower to be added to the company's existing station near Thomaston, Texas. The proposed facilities are estimated to cost \$2.9 million and will enable Wilcox to increase system capacity to approximately 200 million cubic feet per day. These quantities of gas are to be delivered to Texas Eastern (Wilcox's sole customer).

The Federal Power Commission has exempted three more companies from regulation under the Henshaw Amendment to the Natural Gas Act. The three companies exempted are: Acme Natural Gas Company, the Dome Gas Company, Inc., and the Producers Gas Company, N. Y. Since March 27, 1954, when the Henshaw Amendment was signed into law, 60 companies have been exempted and two others partially exempted.

Gas institute schedules engineering refresher courses

AN OPPORTUNITY for engineers to familiarize themselves with current problems and practices of the natural gas industry will be offered in the fourth annual summer session at the Institute of Gas Technology, Chicago.

The program is set up as four three-week refresher courses for experienced engineers and as basic engineering for college seniors. "Natural Gas Production and Processing"

will be presented from June 13 to July 2; "Natural Gas Transmission", July 5 to July 22; "Natural Gas Distribution", July 25 to August 12; and "Natural Gas Fuel Utilization", August 15 to September 2.

Each course is comprised of a series of lectures, discussions, quizzes, seminars, and inspections of natural gas operations in the Chicago area. The seminars are led by invited

specialists in particular phases of gas operations.

Applications will be accepted up to 30 days prior to the opening day of the course desired. Tuition will be \$60 for each three-week course. Enrollment forms are available by writing: The Director, Institute of Gas Technology, 17 W. 34th Street, Technology Center, Chicago 16, Illinois.

Pacific's assembly lines process pipe in new Decoto yard

THOUSANDS OF FEET of ready-to-install pipe of dimensions up to 12 inches are beginning to come off the assembly lines of Pacific Gas and Electric Company's new Decoto Pipe Yard. The plant processes pipe which the utility company uses in its gas system throughout northern and central sections of California.

When pipe is delivered to the yard from factories, it is put through the assembly processing line to be dried, pellet-blasted and then given three enamel-and-felt coats before being stored on racks for shipment as needed.

Designed to operate more efficiently than older pipe yards at Davis and Emeryville, the plant eventually will have a capacity of be-

tween 40,000 and 50,000 feet per eight-hour day, or about 8 to 10 million feet a year. When in full operation, it will process pipe of all sizes used by the company, from the 3/4-inch service laterals attached to home meters up to large transmission line diameters. The plant finally will represent an investment in excess of \$800,000.

SGA holds annual meeting in New Orleans this month

THE Southern Gas Association announces plans to hold its 47th annual convention on May 16, 17, and 18 at the Roosevelt and Jung Hotels in New Orleans.

Over 30 prominent speakers from every part of the country will be featured at the convention. Special sessions on accounting, accident prevention, distribution, employee relations, sales, and transmission, have been

scheduled by convention chairman Thad W. Rowen. Plans also include entertainment and special events for the ladies attending.

Key speakers are: Merryle S. Rukeyser, who will discuss "What's Ahead for the U.S.A."; Dr. J. Donald Phillips, president of Hillsdale College, Mich., will lecture on discussion technique; Arthur H. Motley, publisher of

Parade, will talk on salesmanship; F. M. Banks, president of American Gas Association and the Southern California Gas Co. at Los Angeles will offer sales suggestions in his talk, "Breaking Through the Sales Barrier"; and T. T. Arden, president of the Gas Appliance Manufacturers Association, who will address the general session on Tuesday.

Utility employees receive A.G.A. safety merit award

EMPLOYEES of Hope Natural Gas Co., Clarksburg, W. Va., were guests at a special dinner recently, in honor of their safe working habits. Eighty-five members of the firm's Cornwall station and gasoline plant, and the meter department attended. Each of the two

groups of employees has completed more than a million man-hours of work without experiencing a lost-time injury.

J. C. Cross, vice-president of the company, presented an American Gas Association Safety Merit Award to C. W. Eneix, head engineer,

who represented the employees of the station and gasoline plant. He also presented each employee with a National Safety Council "Green Cross for safety" mechanical pencil. C. T. Cummings, safety director, acted as master of ceremonies.

Lane-Wells effects merger with Dresser Industries

DRESSER Industries has assumed ownership of Lane-Wells Co., in accordance with the resolution reached by stockholders of Lane-Wells at a special meeting in Los Angeles.

Terms were that Dresser Industries, Inc.,

Dallas, would acquire Lane-Wells assets, and issue 576,000 shares of common stock to Lane-Wells stockholders, on the basis of four shares to every five. Ninety-five percent of Lane-Wells stockholders voted for the plan.

Other members of the Dresser group include: Clark Bros., Dresser Manufacturing Div., Dresser-Ideco, Ideco Div., Magnet Cove Barium Corp., Pacific Pumps, Roots-Connorsville Blower, and Security Engineering.

Servel outlines '55 selling plans, lowers retail prices

THE EXCLUSIVE AUTOMATIC "ice-maker" will continue to be Servel's most important gas refrigerator sales feature in 1955, according to an announcement by John H. Wall, vice-president and general manager

of the company's home appliance division. The Servel line this year has been shortened from a total of eight gas refrigerators to six, in accordance with requests from utility companies.

In addition, lower retail prices and wider distributive margins means that the 1955 suggested cash installed prices are approximately \$20 lower per model than corresponding Servel refrigerators as of April 1, 1954.

Dominion Natural Gas sets plans for 1955

THE year's sales promotion operations as well as a new training program on customer relations for all employees were important topics at a meeting of the board of directors of Dominion Natural Gas Co., Brantford, Ontario. Twenty members of the company's

supervisory group also attended the meeting.

John R. Reeves, president, reported that about one million dollars had been spent this year in new plant facilities and services. He said, "A study has been made of the many problems involved and the substantial expend-

itures to be required for distributing additional natural gas supplies from western Canada."

Mr. Reeves also reported that additional supplies are scheduled for this and many other Ontario areas in 1956.

Southern Gas Association discusses distribution

THE ANNUAL Southern Gas Association Distribution Management Conference was held at the Jung Hotel in New Orleans, Louisiana, on March 17 and 18. The meeting was directed by the vice-chairman of the SGA Distribution Section, B. F. Worley of United Gas Corporation. Thirty-three representatives from 24 companies attended the conference.

J. Stanford Setchell, secretary, Operating Section, American Gas Association, gave a brief resume of A. G. A. distribution activities. Then plans for the SGA Distribution Section during the 1955-56 association year were discussed. It was determined that the Distribution Section would sponsor seven round-table conferences in the coming association year.

The dates, places, and chairmen of the meetings will be announced.

The conference concluded with a discussion of subjects of general interest to those in attendance. Construction and maintenance, metering, work on consumers' premises and company uniform policies were among the main topics.

Pittsburgh companies announce recent changes in personnel

EDWARD C. INGRAM has been elected vice-president of New York State Natural Gas Corp., Pittsburgh. Mr. Ingram, well-known throughout the gas industry, will continue his duties as general superintendent of the firm. He began his service with the corporation in 1932, was promoted to district superintendent in 1938, general superintendent in 1952, and director the following year. Mr. Ingram also served as assistant superintendent of production and storage for The Peoples Natural Gas Co., Pittsburgh, sister company of New York State Natural Gas Corporation.

Announcement was also made of the appointment of Eugene R. Seifert to the position of sales manager. In addition to his new duties, he will continue to supervise tax negotiations for the firm, and will also handle special negotiations involving the purchase of new properties. A veteran of over 30 years of service with the company, Mr. Seifert was general land agent prior to his promotion.

Before coming to the Pittsburgh headquarters, he was a district superintendent in Sabinsville.

Other appointments in the corporation include: Edward Emerson, Jr., head of the personnel department; Donald L. Barger, superintendent of production and transmission; Robert S. Jefferies, chief engineer; Charles E. Altman, superintendent of the Sabinsville district; and John E. Stuchell, superintendent of the Harrison district.

Stuart E. McMurray has been elected a director of The Peoples Natural Gas Company. A graduate of the University of Pennsylvania, Mr. McMurray has been with the firm for 20 years, and was made assistant treasurer in 1946.

Norman D. Bradley has been appointed industrial relations manager of the Consolidated Natural Gas System, parent company of The Peoples Natural Gas Company. Mr. Bradley, who began his term of service with the Consolidated companies in 1929 as a geologist, is

replacing L. M. Ayers. The latter retired on March 1, after 11 years with the firm, and a long and successful career in industrial relations.

Messrs. Ingram, Seifert, Jefferies, McMurray, Bradley, and Ayers are members of the American Gas Association.



Edward C. Ingram



Eugene R. Seifert

Personal and otherwise

Northern Indiana promotes Schahfer, Sackman

TWO Northern Indiana Public Service Company executives were named vice-presidents last month at the company's annual board of directors meeting. They are Rollin M. Schahfer, chief engineer, and James C. Sackman, general sales manager. Mr. Schahfer will be vice-president in charge of engineering and electric operations, and Mr. Sackman, sales vice-president.

E. D. Anderson, first vice-president, became executive vice-president of the com-

pany, while W. A. McDonough was re-elected vice-president and controller.

Mr. Schahfer is a member of the American Gas Association, Indiana Electric Association, and the American Institute of Electrical Engineers. Mr. Sackman is an A. G. A. member, and director and past president of the Indiana Gas Association.

Mr. Anderson, an A. G. A. member, is past president of the Indiana Electric Association and the Indiana Gas Association.

Douglas, safety leader, retires from UGI after 54 years

JAMES BACON DOUGLAS, safety pioneer and employee of the United Gas Improvement Company for 54 years, retired on March 1. Throughout his career, Mr. Douglas was active in the claims, safety, insurance and welfare fields, finally becoming manager of the

Philadelphia Gas Works casualty and insurance department.

A member of the former American Gas Institute, predecessor to the American Gas Association, Mr. Douglas was first to recommend, and was chairman of the group's first safety

committee. He was also one of the first members of the National Safety Council, and served as chairman of its Public Utilities Section. He also served as a member of the Pennsylvania Gas Association, American Standards Association and the Philadelphia Safety Council.

Manlove, Wittmann assistant vice-presidents



Emory A. Manlove



Bernard H. Wittmann

Bernard H. Wittmann to assistant vice-president in charge of sales. Both men are members of the American Gas Association. Mr. Wittmann is vice-chairman of the Residential Gas Section.

An assistant to the vice-president since 1952, Mr. Manlove began serving the firm as junior engineer at the Calumet distribution station. He served in the same capacity at the Crawford station for five years. He later became engineering assistant, assistant to the general superintendent at Crawford station, and operation analysis engineer.

Mr. Wittmann started as junior clerk at the Roosevelt Road branch office in 1920. He successively served in several positions in the sales division, and was appointed manager of domestic sales department in 1939. He has been an assistant to the vice-president for the past two years.

West Ohio names Reid

JOE D. REID, formerly vice-president and operating manager of West Ohio Gas Co., Lima, has been elected president and general manager. He succeeds George S. Vail, who retired on March 15.

Mr. Reid joined West Ohio Gas in 1946 after his discharge as an officer in the Army Corps of Engineers. Before World War II, he served Southern Union Gas Co., Dallas, for 12 years. He is a graduate of Southern Methodist University where he majored in engineering and business administration. Mr. Reid is a member of American Gas Association.



Joe D. Reid

THE Peoples Gas Light and Coke Co., Chicago, announces the promotion of Emory A. Manlove to the position of assistant vice-president in charge of industrial relations, and



John B. Klumpp

consulting engineer and former president of American Gas Association, died on March 29 in Philadelphia. Mr. Klumpp had a long and distinguished career in the public utility field and was recognized as one of the country's outstanding gas engineers.

In addition to his term as A. G. A. president in 1924, Mr. Klumpp served as the first chairman of the Association's Technical Section in 1919. He was an Association director from 1924 to 1934. In 1929-31, he was chairman of the Association's committee which presented an argument against a tariff on oil before the United States Senate and House of Representatives. He also served as chairman of the Association committee which prepared a report covering safety rules and instructions pertaining to gas works activities.

A graduate of Stevens Institute of Technology in 1894, Mr. Klumpp was later awarded a degree of Doctor of Engineering from that college. He was employed by the United Gas Improvement Company until 1929 when he entered private practice as a consulting engineer, and during his U.G.I. employ he had charge of the operation and construction of gas properties owned by the company in various cities throughout the country. At the time of his resignation he was a vice-president of the company.

Mr. Klumpp has served as a gas and electric consulting expert for the National Civic Federation; as a witness on gas standards and rates before many state public utility commissions, and with the U.S. Bureau of Standards, and as a consultant for the Counsel of National Defense during the World War I in connection with the production of toluol. Since 1930, he has been consulting engineer to the Municipal Gas Commission of Philadelphia concerning the operation of the Philadelphia Gas Works.

He was a member of the American Society of Mechanical Engineers, the American Institute of Electrical Engineers, past-president of the Society of Gas Lighting, a member of the

Franklin Institute and the Institution of Gas Engineers in Great Britain.

Mr. Klumpp is survived by his widow, the former Theodora E. Meyer, and a sister, Mrs. George A. McIlroy of Jersey City.

William A. Kelly

manager of the customers' accounts department, Consolidated Gas Electric Light & Power Company of Baltimore, died on March 30 at the age of 48. Mr. Kelly joined the company in 1923, immediately after graduation from high school. He completed his education through night school courses, and was graduated from the Baltimore College of Commerce in 1930. He became a certified public accountant in 1931, took a degree from the University of Baltimore Law School in 1937, gaining admission to the bar the following year.

Mr. Kelly was a member of the American Gas Association and Edison Electric Institute Accounting Sections; the Maryland Association of Certified Public Accountants, the legal fraternity Gamma Eta Gamma.

Mr. Kelly is survived by his wife, three daughters, two sons, two sisters and a brother.

Plastics report

(Continued from page 38)

SPI has been asked to prepare similar recommendations applicable to reinforced plastic pipe. It is hoped that such information will be provided soon.

Considerable discussion has been had on the desirability and details of a test for resistance of plastic pipe to impact, such as might be caused by dropping the pipe, or dropping materials on the pipe. The SPI and gas industry members of

the subcommittee have agreed to give this matter further study.

The matter of distance of plastic materials to manufactured gas drip liquids has been again reviewed, and the following resolution adopted: "The Subcommittee on Plastic Pipe Standards wishes to reiterate its conclusion that the materials used to produce thermoplastic pipe for gas industry use underground are subject to attack by aromatic hydrocarbons. Therefore, the subcommittee cannot recommend the use of such pipe

for the distribution of manufactured gas until further research and tests have been completed." This resolution has also been submitted to the Distribution Committee.

The subcommittee very greatly appreciates the cooperation it has received from The Society of the Plastics Industry, and from individual plastics manufacturing and fabricating organizations. It is hoped and expected that additional information can be obtained, and it will be circulated as it becomes available.

Excess liability

(Continued from page 24)

perience over the years, it will find that it could have profitably carried the additional liability as a part of its self-insurance program.

Another advantage to the gas company of a proper retention lies in the routine of claims handling. Practically all excess liability policies are arranged on an indemnity basis; so that the insured retains the obligation to investigate and handle its own losses, subject to collaboration with the underwriter only in the event a loss might exceed the retention. With a retention as low as \$10,000 the claims-handling facilities of the insured are not afforded a sufficient area of independent action; inasmuch as the excess policy comes too frequently into play in the negotiations for the settlement of unimportant claims.

Occasionally there is unnecessary delay in settlement proceedings, arising out of need for consultation between the insured and the insurer, with the result that an opportunity for favorable settlement may pass and litigation follow. Frequency of involvement of the excess policy creates added cost and inconvenience which should be avoided; and a low retention narrows the area within which the gas company may freely exercise discretionary privileges in recognizing legal liability or the absence thereof.

Good will is specially important to gas companies, and the need to preserve it is often the controlling reason for the establishment of a self-insurance program. Having created facilities for the investigation and settlement of claims there is little advantage in assuming so small a first loss as to limit an additional opportunity for improving public rela-

tions.

From the point of view of the excess carrier, a low retention requires the underwriter to cope with matters which are not his proper concern, and which should be dealt with by the primary insurer. The area immediately above \$10,000 is very difficult to rate because of its sensitiveness to small losses. Moreover, since the portion of the rate assignable to this area is large, it follows that control of the ebb and flow of losses necessitates substantial rate adjustment.

I feel it would be a very constructive move to encourage the carrying of higher retentions, thus permitting the catastrophe underwriter to function in an area which is properly his. Free of the need to load his rate for the many payments made over a small retention, the excess carrier can turn his attention to the establishment of rates for the losses of

the types you are really concerned about. Fluctuation of such rates would then be in a pattern controlled by the evolution of the truly catastrophe elements of your business, rather than by the condition of your sidewalks or the treads on your stairways.

Prior to our troubles of a few years ago it was not customary for excess underwriters to examine their risks beyond the point of reading your excellent annual reports. Having learned through the payment of losses that the gas industry had been going through an era of extensive change, it was decided that careful examinations would be necessary if we were to understand the hazards involved and establish rate levels which would not be exposed to violent change.

More recently, the safety people of my company have devoted a great deal of time and effort to examining the gas risks we have been privileged to insure and to determining the causes of the many losses we have paid. This has proved to be a very desirable, though costly, venture. It has brought our people into closer contact with your industry and I am frank to say that we have learned a great deal.

We recommend to the excess market, at large, that it take a greater direct interest in the evolution of your business so that it will not be necessary in the future to learn of new hazards, and of the lessening of existing hazards, only through the eyes of the claim file. If an excess market is to modify its rate levels in an orderly and prudent manner, this cannot be done in the absence of firsthand, professional information as to the state of the subject industry. How can such information be procured except by actual examination of risks?

Southern Natural safety—

(Continued from page 10)

In these reports the supervisor states the cause of the accident and his belief as to how it might have been prevented.

All automotive accidents are also reported to the safety department whether or not there are injuries involved.

The safety department investigates all lost-time accidents and as many of the others as feasible. Accidents are analyzed by the safety department.

First aid cases are not reported to the safety department but are entered in books kept with the first aid kits.

The examinations, which averaged three to four days in completing, were met with favor; and, as we explored more and more risks, we began to suggest with confidence and understanding a number of modifications of a practical kind. The cooperation our people met was splendid. Often it included the bringing to our attention of defects which we would not otherwise have detected.

It was quickly learned that, if the safety specialist is to be effective in his work, he must be acceptable to your technical people and must recognize that a great many of your problems cannot be solved in a single afternoon, but must be worked out through a thoroughly organized program of correction, sometimes over a period of months or years.

Your industry has made tremendous strides in the use of new precautionary techniques, new safety mechanisms, and realistic safety standards and codes. While a great deal has been accomplished, there still is much to be done; but I know from past performance that the American Gas Association will continue its emphasis on safety in all its phases.

Necessary corrective measures are being pursued at considerable cost in money to your industry. It is our conviction that a great deal can be accomplished at little or no cost in the prevention of losses through the medium of education and training programs for employees engaged in your maintenance and service functions.

Our inspectors have had occasion to make many recommendations for the training of employees in good habits of work in carrying out the many service requirements demanded of gas companies. A comprehensive educational pro-

Comprehensive records are kept and frequency and severity rates are posted monthly as well as annually.

Employees are given pre-employment physicals, local doctors completing forms provided by the company. We feel this examination is most worthwhile. As many as eight percent of the applicants on a single construction project have been rejected for hernia. The company does not employ a staff doctor.

Southern Natural pioneered last year with a "Good Health Caravan" which covered our entire system. Technicians and equipment supplied by the Birmingham Industrial Health Council took

gram does much to reduce the influence of human failure in your loss experience and those gas companies with already established training routines would do well to exercise constant surveillance to see that they do not become routine.

Our observations also encourage me to suggest that management maintain a constant review of the system for the handling of customers' complaints, in order to be certain that the system is sensitive to the need for prompt and thorough attention to such complaints at all hours of the day or night. Adequate records of the activities of employees in handling customers' complaints are not being kept in many instances with the result that a pattern of danger, should it develop, might not receive the attention it deserves. Maps of underground installations, which have been permitted to become obsolete because of changes in personnel or ownership, should be brought up to date where necessary. All of these things are important in the reduction of losses and in increasing customer acceptance of your products and services.

The maintenance of a stable market is by no means the responsibility only of the gas industry. The insurance companies, too, can do much to help by giving constructive recognition to the evolution of your business in the establishment of rate levels, but without losing sight of the need of long-range reserves for large losses. They would also do well to learn more about your business and the problems you are encountering in loss prevention.

Most important of all, having decided to become a market for your catastrophe risk, an insurance company should possess a determination to persevere as a market when the going is rough.

Chest X-rays, measured blood pressure and gave electrocardiograms for all over 40 or where indicated. They took blood samples and ran tests for hemoglobin deficiency, diabetes and syphilis. An urinalysis was run and sight and hearing checked. Employees whose tests showed potential or actual troubles were notified directly by the Industrial Health Council and advised to see their own doctor. The company was not advised of individual results from these tests.

It's planned to recommend to management that these system-wide tests be repeated every two years.

For executives and all office employees

on the administrative payroll (except pilots who take a special flight physical) a complete physical examination is provided by the company. Results of these more intensive examinations are reported to employees concerned and to the company.

We feel that our field employees have a greater than average sense of personal responsibility for safe operating practices. No doubt the group and personal awards listed earlier have played a part in this and it's not unusual for one em-

ployee to stop another seen in a precarious position with "That's my ham you're risking".

Also a factor, we believe, is the emphasis in safety meetings on the individual's responsibility for bringing up unsafe conditions and actions.

As outlined in this report, present and planned formal safety training is directed towards the individual members of our organization without differentiation between supervisors and rank and file employees.

Since our safety program was officially set up 13 years ago, three of our field units or locations have never had a lost-time accident, four more have gone more than ten years and four more than five years.

Since 16 of these 38 operating units have been in existence less than five years we hopefully anticipate a rising number in the "Steak Division".

We are definitely of the opinion that safety can best be sold on a basis of rewards, not retribution.

Another winner

(Continued from page 10)

group. Supplementary inspections are made by the district safety supervisor and the insurance engineer. Recommendations from both inspecting groups are sent to management; priority and feasibility are determined and prompt action is taken.

To help in maintaining safe working conditions and to guarantee the purchase of only approved safety devices or safety equipment, requisitions for purchase of these materials are forwarded to the System safety department before the actual purchase is made.

With a smaller organization like North Shore Gas, it is not practical to have a large scale formalized safety training program. Because of various limitations a more practical approach is attempted. In addition to the usual introduction to company policies, the new employee is given a pamphlet entitled "Greetings to the New Employee". This booklet contains basic safety rules he must know in order to do his work in the prescribed manner. On occasion, small schools for service men and the like have been set up to help answer an immediate need.

By the time the average employee is considered for promotion to supervisory grade, he has been exposed to our entire program. He is not left to his own devices once he becomes a supervisor, but gets guidance and counsel from the man-

ager and the safety department. We feel that our supervisors are the key to the entire program.

All industrial accident reports are made out whenever an employee is injured. The degree of injury has no bearing on whether or not such a report is filled out. We have just put into effect a supervisor's report form which will add substantially to the awareness of accident-making possibilities. This form will serve as a medium of expression for the foreman who will now be able to point out in his own words HOW and WHY the accident happened, and what is needed to insure against recurrences.

All new employees are given pre-employment physical examinations by local doctors approved by the System's medical director. These examinations are very complete and the knowledge gleaned from them has helped in many cases to correct situations which were not immediately apparent. Employees may visit the company clinic held at regular intervals. This medical program has been developed to a point where many of the earlier reasons for absenteeism are now eliminated. Yearly physical examinations are not attempted for all employees. There is, however, a regular health examination given to certain supervisory classes.

Employees receive some first aid training on the job by the local safety committee. It is not possible to conduct the formal American Red Cross Standard First Aid course during company hours, but such a course is offered to all employ-

ees during their off-duty hours. Monthly practice and re-instruction is a must for all employees in the various methods of resuscitation and the use of the inhalator.

In order to arrive at our ultimate goal in accident prevention, we believe that it is absolutely necessary that every man and woman on the payroll accept his or her share of the responsibility for working safely. Various campaigns have been devised to stimulate interest and encourage cooperation.

Perhaps the most remarkable of these campaigns has been the System's annual October No-Accident Campaign in which North Shore Gas participates.

Daily reminders to all employees during these campaigns is an easily accomplished fact with the passing out of a suitably inscribed book of safety matches or the use of other "reminders" such as work caps, tags, notebooks, automatic pencils and posters—each designed for the specific campaign and inscribed with a challenge to the individual to help make the goal of freedom from accidents possible.

It is our feeling that such a campaign not only stimulates interest, but that it trains and retrains both the old and the new employees. These campaigns have done a great deal for us and we earnestly recommend them to other companies . . . not as the whole safety program, but as a very important part.

North Shore Gas is proud of the response and cooperation of all employees. Each is entitled to his share of credit for winning this most recent A. G. A. award.

Gas best buy

(Continued from page 14)

heater replaces the corresponding gas appliances in houses in which there is no three-wire, 220 volt service within the house, and second, where a new house is

being considered in which three-wire service is available, but the cost of the interior house wiring must be included in the installation costs.

The accompanying installation cost chart summarizes the above costs. This is shown in the report in tabular form.

Maintenance Costs: Relatively few reporting companies kept segregated accounts from which maintenance costs could be determined. In a limited number of instances rather good records were available and these were used to prepare the average maintenance cost

data. The long history of comparative tests conducted by numerous competent persons and independent agencies, such as the home economists of women's magazines, the University of Illinois, the Agricultural Research Service, as well as A. G. A., has demonstrated repeatedly that electric ranges and water heaters are not superior to gas. In fact, the tests

have proved that gas water heaters will out perform electric water heaters size for size and that gas ranges match, and on some points surpass the performance of electric ranges.

Unfortunately, due to the heavy barrage of competitive advertising, the customer sometimes fails to realize these points and in such cases the gas sales-

man should have available authentic data on comparative equipment costs. The complete cost information contained in this report can readily be used to show the customer that if an electric range or water heater is purchased, a high premium is being paid though no compensating improvement in equipment performance is achieved.

New York-New Jersey

(Continued from page 39)

tion picture on gas house heating entitled "Hey, Charlie!" prepared by Con Edison.

On Tuesday afternoon, beginning at 2:00 p.m., a series of three round table discussions will be conducted. Leaders

and their subjects are "The Gas Clothes Dryer", by Norman R. Millard, director of gas appliance sales, Bendix Home Appliance Co., Newton, Mass.; "Advertising", by C. Fred Westin, assistant director of advertising, Public Service Electric and Gas Co., Newark, N. J., who is also president of the Public Utilities Advertising Association; and "Home Service

and Sales" by Ruth Soule, home service director, The Brooklyn Union Gas Company, Brooklyn, New York.

The Manufacturers' Friendship Room will be held in the West Ballroom.

If you are interested in residential gas sales and want the answer to many of your sales problems, make your plans to attend the Conference now!

Knapp retires

(Continued from page 12)

the Laboratories operational procedures. He was registered as a professional engineer in the state of Ohio in 1935.

Because of his wide experience in gas utilization matters and his knowledge of the gas industry's problems, Mr. Knapp in 1946 was named assistant director of

the Laboratories. In this capacity he supervised the Laboratories appliance approval testing, field inspection and approval standards program until his retirement.

In 1947 he was appointed secretary of the Committee on Gaseous Fuels, D3, of the American Society for Testing Materials and in this capacity has made many contributions to its work.

During his 26 years with the Laboratories, Mr. Knapp has contributed greatly to the success of its operations. Always willing to share his wealth of experience with the more than 300 young engineers who started their careers with the Laboratories and then moved on into the industry, he has a host of friends among gas appliance manufacturers and gas utilities.

Research Village

(Continued from page 7)

Co., and Handley-Brown Heater Company.

Suppliers of dryers and washers include Hamilton Manufacturing Co., Bendix Home Appliances—Avco Manufacturing Corp., The Maytag Co., and Temco, Inc. Servel, Inc. supplied two re-

frigerators; Bowser, Inc. and Cribben & Sexton Company supplied incinerators and Peerless Manufacturing Corporation supplied two bathroom heaters.

In addition to the gas industry, ten other industry groups are cooperating in the project.

Working as a creative and practical building team, objective of the architects

and builders was to create new design and construction ideas that builders could adapt to their own designs and requirements to stimulate consumer sales appeal. To get a nation-wide cross section of ideas and experiences, architects and builders from the Northeast, Southeast, Southwest, Midwest and Pacific coast areas were chosen.

Industrial relations

(Continued from page 15)

violate the National Labor Relations Board's flat ban against alteration of sample ballots for pre-election propaganda purposes, the National Labor Relations Board says that the fact that both sides were guilty of the banned practice doesn't cancel out the misconduct. And the Board again says it can apply its rule against sample ballot alteration to situations that took place before the ban went into effect. Where the argument is put up that the Board is making retroactive application of the rule, the agency points out that "the rule is remedial, not punitive".

The rule was set out September 14, 1954 in the Allied Products case, and provides that the Board "will not permit the reproduction of any document purporting to be a copy of the Board's official ballot, other than

one completely unaltered in form and content and clearly marked sample on its face, and upon objection validly filed, will set aside the results of any election in which the successful party has violated this rule".

First use of the rule in an election case that took place before the Board's ban was announced came in the Tube Reducing Corporation case.

In the case at hand the Board sets aside an election at Wilmington Casting Co., Wilmington, Ohio. The poll had been petitioned for by CIO's United Auto Workers. The voting, in which UAW-CIO lost, was carried on February 5, 1954.

After objections had been filed by the union to the conduct of the election, the matter reached a second hearing on June 8, and the hearing officer issued a report October 1, 1954, recommending the election be set aside on various grounds, including the objection that the employer had circulated sample ballots a few days before the vote in

which an "X" had been marked in the box for "no union." In addition to complaining that the Board would be applying its new rule retroactively if it accepted the recommendation of the hearing officer, the company contended that since the union also circulated an altered sample ballot the actions of the two parties were neutralized.

But, ordering a new election, the Board says: "It is impossible for the Board to gauge with mathematical precision the extent to which improper pressures on the employees by one party have been offset by improper pressures by the other party. It would be unrealistic to assume that where, as here, the opposing pressures consist of the same kind of misconduct, they have canceled each other out and the employees' freedom of choice has been left unimpaired."

In addition the Board points out it has frequently held that "interference with an election by one party does not license interference by the other".

Better Management

(Continued from page 18)

ance industry had acquired about \$14,600 million of securities of the total utility industry. This represented about 25.8 percent of all utility securities.

He said that in 1954 the gas utilities raised \$1,138 million of capital.

Slightly over \$1 billion was in long-term debt and \$63 million and \$71 million in preferred and common stock respectively. However, only \$638 million of this was new money, with \$500 million in refunding and divestments.

Since the end of the war gas utilities have done a tremendous job. They have increased plant by \$7¾ billion or 154 percent since 1945, and have spent nearly \$9 billion in construction, the speaker said. Customers have increased from 20 million to nearly 28 million and about 150,000 miles of transmission and distribution mains have been added.

Insurance companies played a major role in this great expansion, Mr. Severne said. If senior financing had not been available from insurance companies, some of these pipelines could not have been built. A great number of new pipelines could not have been financed in the traditional public utility way of a maximum of 60 percent debt and 40 percent preferred and common stock. But the insurance companies felt safe with contracts for assured supply at one end and contracts for assured customers at the

other end of the pipelines. Today, the seven leading insurance companies hold about \$2 billion invested in transmission and distribution securities.

R. S. Gillespie, Indemnity Insurance Co. of North America, Philadelphia, discussed excess liability insurance at a luncheon meeting of the insurance group at which Mr. Sprague presided. Problem drinking and evaluating executive talent were topics of discussion at the Personnel Committee luncheon with Elmer L. Ramsey, Laclede Gas Co., presiding. Dr. S. C. Franco, Consolidated Edison Co. of New York, and Dr. O. A. Ohmann, Standard Oil Co. of Ohio, were speakers.

Business and general meetings were continued in the afternoon. The Accident Prevention Committee held a panel session, while acceleration of processing of rate cases was discussed at a joint meeting by Walter J. Hermann, Southern California Gas Company.

Phil West, vice-president, New York Stock Exchange, told a meeting of the Corporate Secretaries Committee of the educational program the Exchange is conducting to acquaint the public with the true role of the Stock Exchange. Richard S. Nye, Georgeson & Company, explained some of the problems encountered in soliciting proxies, particularly in contests for management control of big corporations. Taxes and insurance were topics at the afternoon meeting of the Insurance Committee.

William B. Tippy, executive vice-president, Commonwealth Services, Inc., pre-

sided at the final general session on Wednesday morning. Dr. Robben Fleming, University of Illinois, advocated collective bargaining as a method of settling labor disputes in public utilities. This method he said might be favored over the other alternatives which he grouped as "compulsory arbitration", the "statutory-strike" and "flexible legislation". John M. Hines, Equitable Life Assurance Society, pointed out the economic and social implications inherent in extending fringe benefits.

At the final luncheon, Dr. John R. Dunning, Columbia University, traced the progress made in production of atomic energy. This now has become a major industry, he said. Energy demands are rising and resources are decreasing. We must find new energy reserves and the atomic energy field offers the only feasible solution now on the horizon. Atomic energy reserves today are at least 25 times as great as today's reserves of gas, oil and coal—perhaps 100 times greater. Gas still has many advantages as a fuel, though over last ten or 15 years its markets are being located at further distances from sources.

Atomic process heat may be one way of producing gas from coal or oil in the future, he declared. He described some of the atomic energy plants now in operation and advocated further entry of private industry into this field. The sooner the field is opened up to active competition, the better it will be for the future of the nation, he stated.

Distribution Conference

(Continued from page 38)

paper by George Peachey, Boston Consolidated Gas Company. In the absence of Mr. Peachey, the paper was presented by Marshall David of the same company.

Field work in a program to overhaul district regulators was described by Elmer Henson, Nashville Gas Company. The use of records to control a similar program was related by William Kenyon, Washington Gas Light Company.

The conference concluded with an interesting motion picture illustrating new tools and power cutting instruments, presented by F. Rudman, Michigan Consolidated Gas Company.

Presiding at the conference was R. C. Holcombe, chairman of the Sub-

committee on Construction and Maintenance.

Corrosion

Two luncheon conferences were held by the Corrosion Committee. The first, on Wednesday, was opened by C. W. Beggs, committee chairman.

The over-all subject for the session was corrosion mitigation practices in distribution systems and six speakers presented various aspects of these problems. W. J. Kretschmer, Columbia Gas System Service Corp., presided.

The principal methods for application of protective currents to buried mains and services were considered and discussed. The beneficial effect of coating on pipe which is also cathodically protected was noted by the speakers.

Various types of coatings were dis-

cussed in relation to their effectiveness according to the locations of services. The use of insulating joints as a means of breaking up large systems into small units electrically and as a means to separate dissimilar metals was discussed.

Cooperation between underground structure operators was advanced as a means of protection of one's own system without damage to that of another operator's system. A neighborly attitude could prevent this from happening, it was said. Grouping of local operators into corrosion committees was advanced as a means to obtain this cooperation.

The second corrosion luncheon conference was opened with remarks by N. P. Peifer, vice-chairman, Corrosion Committee. Feature of the meeting was a comprehensive display of in-

struments, arranged by F. W. Ringer, chairman, Subcommittee on Corrosion Instrumentation.

A five-man panel demonstrated the instruments and conducted an open discussion on their uses.

Customer service

Two customer service luncheon conferences were held, one on Tuesday and the other on Thursday. John MacLarty, Customer Service Committee chairman, presided at the first and emphasized the significance of the increasing importance of customer service to the industry.

He observed that the elevation of the customer service group from subcommittee to full committee six months ago indicated that the Operating Section recognizes the growing significance of customer service work.

The Tuesday luncheon was devoted largely to discussion of gas fired incinerators and gas househeating. W. G. Hulbert, East Ohio Gas Co., reviewed the service experience of his company on 80,000 incinerator installations. This was followed by an outline of the development of the domestic gas incinerator by Howard Scott, A. G. A. Laboratories, including discussion of design features which may appear in the near future.

H. S. Blanding, Consumers Power Co., moderated a househeating service panel. The panel consisted of John Gagen, Consolidated Edison Company of New York; Cecil Miller, Iowa-Illinois Gas and Electric Co.; and Charles Ruff, Michigan Consolidated Gas Company.

A report was given by the chairman on the aims and accomplishments to date of the recently formed Committee on Adequate Housepiping.

The Thursday meeting was started with D. L. Drake's interesting account of meter activities in his company, Consolidated Gas and Electric Company of Baltimore. This was the first time in many years that there had been a presentation made on meter activities and it was well received.

Second subject of the afternoon—quality control as a supervisory tool—was given by G. J. Sandusky, Southern California Gas Company. This paper covered the comprehensive activities of the California company in its quality control check of service work. Mr. Sandusky indicated how quality con-

trol enabled them to run down faulty conditions on appliances. Corrective action then could be taken either with the manufacturer or in their training school.

Ralbern H. Murray of A. G. A. Headquarters gave a comprehensive account of the preparation and composition of the A. G. A. appliance service manual and L. G. Ranta, The Peoples Gas Light and Coke Company, told how his company makes use of the manual for the training of servicemen and for the serviceman's use when working on customers' appliances.

The conference was completed with a presentation by Arthur R. Laney, Jr., Washington Gas Light Co., on aptitude testing in selecting supervisory personnel. This presentation showed the test work which had been done with supervisory personnel of The Peoples Gas Light and Coke Co., Brooklyn Union Gas Co., and The Washington Gas Light Company. Mr. Laney explained the tests which were used and the conclusions reached with the particular set of supervisors with whom these tests had been conducted.

In order to obtain validating information on the tests already made, Mr. Laney would like to give similar tests to supervisory personnel of other gas utilities. Anyone desiring to assist in this activity may obtain further details directly from Mr. Laney.

The photographic display of customer service department transportation vehicles accumulated by Mr. Drake drew considerable interest. These pictures showed the type of equipment now in use by about 20 different companies.

The meeting was presided over by W. H. Weber, vice-chairman of the Customer Service Committee.

Distribution design and development

This subcommittee also sponsored two luncheon conferences, the first on Tuesday and second on Thursday. The first, presided over by E. F. Trunk, subcommittee chairman, opened with a discussion of remote control of regulator stations.

The subject was covered by four speakers, who reviewed the progress made by their own companies in various aspects and uses of remote controls. Included was a report on remote control of a complete system, followed

by reports on specific application in underground storage, low pressure district regulators and control of a regulator station handling widely varying load conditions.

Regulator station design and ventilation was discussed by J. F. Schuldts, The Peoples Gas Light and Coke Co., in a report from the Task Group studying this field.

A wide-ranging discussion of distribution problems was handled as an open forum discussion, with W. P. Dick, United Fuel Gas Co., acting as moderator.

Deane W. True, vice-chairman, Subcommittee on Distribution Design and Development, presided over the Thursday session, which was devoted to the single subject of system design and system analysis.

Each known and tried method of analysis was explained and expounded, with the advantages and disadvantages of each disclosed and discussed. Walter C. Peters, Northern States Power Co., presented a paper on his method of practical analysis.

This was followed by a panel discussion on the same topic, with John M. McCaleb, Columbia Gas System Service Corp., acting as moderator.

Among the methods discussed were the Hardy Cross method; use of punched cards to calculate network pressures by the Hardy Cross method; linear resistance analyzer; and non-linear resistance analyzer.

Metering

The Metering Subcommittee's luncheon conference was held Wednesday, with J. T. Stine, Jr., subcommittee chairman, presiding. The session opened with a discussion of the meterman's responsibility to the gas industry by Parker S. Anderson, Michigan Consolidated Gas Company.

The rest of the afternoon was in the main devoted to a discussion of the pros and cons of various types of meters and equipment. Meter capacities, leather and synthetic diaphragms, "snap-on" and "lay-on" backs and fronts were among the topics covered. Presentations on various types of meters were made by manufacturers.

The Task Committee on Standardization of Meter Purchase Specifications made a progress report. It was presented by James Webb, Consolidated Edison Company of New York.

Ind-Com sales meet

(Continued from page 33)

rates which will recognize its value as a service."

The panel discussion on the selection and training of industrial or commercial manpower was led off by H. A. Sutton, Public Service Electric & Gas Co., Newark, N. J. He was followed by Carl Wierum, The Brooklyn Union Gas Co.; W. W. Selzer, Columbia Gas System Corp., New York; and J. H. Coates, Ebasco Services, Inc., New York. Each one outlined the policies of his own company in hiring cadet engineers and commercial salesmen.

Covering industrial and commercial advertising, W. S. Redpath, Ketchum, MacLeod & Grove, Inc., Pittsburgh, quoted some pertinent figures on the small percentage of gross income which is spent for gas advertising. Stressing the need for more effective advertising, he stated, "It is simply advertising which decisively brings better selling results," and set forth four steps to attain these results. They are:

1. Collecting and digesting accurate market information on each class of service or product.
2. Identifying and selecting the best selling arguments.
3. Planning and launching the program itself.
4. Evaluating results.

Mr. Redpath said, "The historical levels of spending by gas companies to advertise industrial and commercial gas have been so low that some say there is nowhere to go but up. Gas companies appear to advertise to the over-all tune of not much more than one-twentieth of one percent of annual revenue. Gas equipment manufacturers spend approximately one-half of one percent of their yearly gross sales. Residential budgets are about 16 times the industrial and commercial percentage."

Chairman Tracy Madole, Magic Chef, Inc., of the GAMA Prize Contest of the PEP Campaign presented the awards to those companies in their respective classes who made the best showings in sales of heavy duty commercial cooking equipment. The winners were: among the companies having over 100,000 meters, the Washington (D. C.) Gas Light Co.; from 25,000 to 100,000 meters, the Piedmont Natural Gas Co., Inc.; and among those companies with less than 25,000 meters, Chattanooga

Gas Company. A \$300 cash award was also given along with the plaques.

Industrial Gas Day held as much interest for the 1955 Conference delegates as the other sessions put together. The program was replete with timely subjects headed by a discussion on modern trends of industrial furnaces by A. H. Koch, Surface Combustion Corp., Toledo. Taking as his theme, "Heat treating costs became one of the first targets of cost reduction program after government defense requirements made manufacturers again turn to civilian products," Mr. Koch outlined present-day heat treating demands, and how costs are being reduced by means of a speeding-up process. This resulted from the development of new equipment permitting higher temperatures which made possible the use of gas as a furnace fuel for stainless steel, copper brazing, powder metallurgy and similar high temperature treatments.

The first of three panel discussions covering industrial gas was on dual fuel equipment. D. A. Campbell, vice-president, Eclipse Fuel Engineering Co., Rockford, Ill., opened the discussion on where dual fuel equipment can best be used. It was based principally on the use of standby fuels where interruptible gas or "off-peak" gas is sold. It is in these situations that the dual fuel equipment is valuable especially for those processes which must remain on the line and cannot be shut down without great loss to the manufacturer.

In the same vein and in somewhat more detail on specific equipment, R. J. Reed, The North American Manufacturing Co., Cleveland, discussed the many heating operations where failure of the heating operation results in down time for expensive associated equipment or for labor . . . or loss of customer goodwill through failure to meet delivery schedules. Mr. Reed went on to tell about the different applications for dual fuel equipment in ceramics, chemicals, forging, in the foundry and for heat treating.

Charles C. Eeles, assistant industrial and commercial sales manager, The Ohio Fuel Gas Co., Columbus, followed through by describing the different types of dual fuel equipment with a preface of definitions of a dual fuel burner; a gas-oil burner; and the combination gas and oil burner; and the combustion results that could be obtained by the use of these different types. He described the

gas-oil burner used particularly for forging where a small percentage of oil with gas gives better fire than straight oil and where straight gas is not effective.

One of the most important steps in selling is the pre-sale analysis of a prospect's plant, processes, needs, and everything else that might have any bearing on the product you are selling. So stated Herman Koester, Jr., vice-president, W. Wirt Young and Associates, Inc., Wellesley Hills, Mass., in his paper on selling. He reminded his audience of the fundamentals of selling that never change. In meeting with a prospect there are three basic problems which must be broken down, he stated. They are job analysis, product analysis, and equipment analysis.

One of the most important applications of industrial gas is in the low temperature field, and starting the panel discussion, Herman Gehrich, Gehrich & Gehrich, Inc., Woodside, N. Y., listed some 25 applications he knew of in the Boston area where low temperatures were required. The scope of his talk covered the necessity of design for each individual job, especially in convection ovens where air velocity and direction must be engineered for the particular item being processed in each case.

John D. Lynch, sales engineer, J. O. Ross Engineering Corp., Boston, covered somewhat the same area but discussed equipment utilizing higher temperatures, about up to the 1000F range with both direct and indirect air heaters. One reason for the development of these higher temperatures has been that new types of textiles and plastics demand them for proper processing and finishing. In the field of paper and paper products manufacture, higher temperatures are required for larger volumes of production on the existing equipment.

Going from air heaters to direct gas fired equipment, G. R. Van Kampen, sales manager, Red-Ray Manufacturing Co., Inc., Cliffside Park, N. J., told his audience of the many applications of direct-fired equipment to evaporate large volumes of water during the initial drying stages of textile production and finishing operations. Much equipment today is still using steam for heating and in order to speed up production rates and run more yardage through existing machines it has been found practical to supplement the steam drying with direct gas applications.

In the case of calender rolls it has been found that burners firing into the rolls have produced the additional heat to increase materially the production rate. In addition direct gas applications have been made on slashers, ovens, tenter frames, singeing and for the processing and curing of nylon and other synthetic fabrics and also in the paper industry.

Insurance companies in the industrial gas picture was set forth in a paper by Alfred Dowden, Liberty Mutual Insurance Co., Boston. He stated that the growth of the entire gas industry during recent years has placed a greater burden on the utilities to keep up with the problem of the safe use of gas.

"While reports of the National Fire Protection Association," Mr. Dowden said, "have shown gas and gas appliances near the bottom of the list as causes of fire loss, accidents involving the public have effects in the gas industry."

try far beyond the immediate locale of the accident. This problem has never been ignored by the gas industry. Employee training programs are effective. Many of the suggestions included in this discussion are not new . . . by discussing several recent accidents, the need for continued effort to control these accidents will be apparent."

From the Factory Mutual Engineering Division, Boston, Louis H. Flanders, Jr., outlined the fire and explosion hazards that could exist or develop in industrial gas equipment. This covered a wide range of appliances and he followed with several suggestions that his organization thinks should be installed on all industrial heating jobs where temperatures are such that the explosive range might be reached. He stated that one hazard that can be guarded against was the human element of error. By rigorous education this can be reduced to a minimum which will be a long step toward plant safety.

The final paper of the conference was presented by Fred K. Whiteside, Selas Corporation of America, Philadelphia, entitled, "Pots, Pans and Pliers". He pointed out that "the versatility and adaptability of gas as a heating tool have again been demonstrated in bringing about developments which otherwise could not economically been achieved." He showed how many processes have only been made possible through the use of gas applications to meet production needs and within a cost range comparable with other plant operations.

Mr. Whiteside gave example after example of specialized equipment to perform the heating operations on scores of products that could never have attained their popularity without the use of gas to make possible mass production. He also made considerable reference to the Selas Gradation process wherein high speed heating at high temperatures has resulted in many metallurgical advantages.

Facts and figures

(Continued from page 19)

Industry-wide electric appliance statistics are based on data compiled by the National Electric Manufacturers' Association and are reprinted by GAMA in their releases. Data on both gas and electric dryer shipments are released regularly by the American Home Laundry Manufacturers Association.

According to preliminary statistics, total operating revenues of the gas utility and pipeline industry during 1954 aggregated a record \$4,655 million, up 12.7 percent over the \$4,130 million recorded in 1953. These totals include both pipeline sales for resale and distribution company sales for ultimate consumption.

Of the \$525 million increase in total operating revenues, \$360 million was absorbed by the increased costs of labor, materials and purchased gas. Depreciation, retirements, depletion and amortization accounted for an additional \$34 million and taxes took \$52 million. Net income of the industry in 1954 amounted to \$449 million, an increase of 14.2 percent over last year. Total taxes paid by the gas industry amounted to \$577 million, up 9.9 percent over the amount paid in 1953. This amount exceeds the \$449 million of current net income by 28.5 percent.

February sales of gas to ultimate consumers totaled 7.6 billion therms, up 22.7 percent when compared with sales of 6.2 billion therms in February of last year. This represents the greatest monthly percentage increase in gas utility and pipeline sales in the past three years. The Association's February index of utility and pipeline sales is 216.9 (1947-1949=100).

There were several factors contributing to this record gain in gas sales, primarily the colder weather experienced throughout the country. Degree days during February were

QUARTERLY GAS INDUSTRY CONSTRUCTION EXPENDITURES

(MILLIONS)

Year	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
1952	\$232	\$257	\$243	\$335	\$1,067
1953	265	346	379	360	1,350
1954	240	315	279	274	1,108 _p
1955	214	383			1,395 _e

p preliminary.
e estimated.

TOTAL INDUSTRY INCOME STATEMENT, 1953-1954_p

(MILLIONS OF DOLLARS)

(REFERS TO ALL DISTRIBUTING UTILITIES AND PIPELINE COMPANIES)

	1954	1953
Total operating revenues	\$4,655	\$4,130
Operating expenses—operation	2,939	2,597
Operating expenses—maintenance	193	175
Operating expenses—total	3,132	2,772
Depreciation, retirements, depletion, amortization, etc.	327	293
Federal income and excess profits taxes	346	304
All other taxes	231	221
Total taxes	577	525
Total operating revenue deductions	4,036	3,590
Net operating revenues	619	540
Other income	35	33
Gross income	654	573
Interest on long-term debt	195	169
Other income deductions	10	11
Total income deductions	205	180
Net income	449	393

p 1954 data are preliminary.

approximately 29 percent greater, nationally, than in the corresponding month of 1954. Although the relationship between degree days and sales is recognized, it should be remembered that the former are measured for a calendar month and the latter during a non-calendar billing period.

Another factor was the existence of 1.1 million more homes now being heated with gas than were heated a year ago. Also contrib-

uting to the gain in gas sales was increased usage of gas by industrial customers. The Federal Reserve Board index of industrial production was 133 (1947-1949=100), up 6.4 percent over last year.

For the 12 months ending February 28, 1955, utility gas sales aggregated 62.6 billion therms, up 8.9 percent over the 57.5 billion therms consumed in the twelve months ending one year earlier.

New A.G.A. members

Gas Companies

- Portsmouth Gas Co., Portsmouth, Va. (John V. Wise, Pres.)
Texas Illinois Natural Gas Pipeline Co., Chicago, Ill. (G. P. Garver, Vice Pres. & Secy.-Treas.)

Holding Companies

- Pennsylvania & Southern Gas Co., Philadelphia, Pa. (C. MacDonald Swan, Vice Pres.)

Service Companies

- Duff and Phelps, Chicago, Ill. (P. P. Stathas, Sr. Partner)

Associate Members

- Colgate-Palmolive Co., Jersey City, N. J. (K. A. Woodhead, Supvr., Soap Dept. Sales Prom.)
Gem Automatic Gas Co., Inc., Granite Quarry, N. C. (F. L. Fagan, Pres.)

Manufacturer Companies

- Alpha Industries, Inc., Logansport, Ind. (E. H. Becker, Pres.)
Garland Commercial Ranges, Ltd., Toronto, Can. (F. A. Kaiser, Vice Pres. & Treas.—Detroit, Mich.)
Junkers & Co., GmbH, Wernau/Neckar, Germany (K. Henrichsen, Dir.)
Mitchell Metal Products Inc., Cleveland, Ohio (John R. Wierdsma, Pres.)
Monitor Manufacturing Co., Chicago, Ill. (Ronald N. Paul, Engr. & Sales Mgr.)
National Steel Construction Co., Seattle, Wash. (John N. Killien, Vice Pres.)
Steel City Furnace Corp., Springdale, Pa. (Fred H. Janke, Chief Engr.)
Superbo Manufacturing Co., Los Angeles, Calif. (K. L. Comfort, Pres.)
Thermogray, Jefferson, Iowa (Pence H. Miller, Secy.-Treas.)
United Pipe Utility Suppliers, Inc., Beloit, Wis. (Eugene Alters, Pres.)
Westomatic Water Heater Manufacturing Co., Citra, Fla. (K. A. Prescher, Owner)
J. F. Winchel Co., Cleveland, Ohio (J. F. Winchel, Pres.)

Individual Members

- Millard G. Allen, City of Alexander City, Water & Gas Bd., Alexander City, Ala.
John L. Andretich, The Peoples Gas Light & Coke Co., Chicago, Ill.
Raymond F. Antolik, The East Ohio Gas Co., Cleveland, Ohio
Samuel Applebaum, Kings County Lighting Co., Brooklyn, N. Y.
Anthony J. Auberger, Milwaukee Gas Light Co., Milwaukee, Wis.
E. George Baker, Mueller Co., Los Angeles, Calif.
Paul J. Balfe, Wisconsin Power & Light Co., Beaver Dam, Wis.
Douglas Ball, Ball Associates, Washington, D. C.

- Ivan E. Ball, Peoples Water & Gas Co., North Miami, Fla.
Aubra B. Banowsky, United Gas Corp., Houston, Tex.
Russell E. Belknap, Long Island Lighting Co., Mineola, N. Y.
A. R. Bermudez, Southern Counties Gas Co., Huntington Beach, Calif.
Carl E. Biermann, Hope Natural Gas Co., Clarksburg, W. Va.
Paul E. Binkley, The East Ohio Gas Co., Cleveland, Ohio
Samuel C. Bishop, Gas Light Co. of Columbus, Columbus, Ga.
R. E. Blair, City Gas Co. of Newton, N. J., Newton, N. J.
Buckley D. Bohna, B. D. Bohna & Co., Ltd., Vancouver, B. C., Can.
Lester G. Brailey, The East Ohio Gas Co., Cleveland, Ohio
Clifford A. Brandt, H. Zinder & Associates, Inc., Dallas, Tex.
Peter F. Brodesser, The Peoples Gas Light & Coke Co., Chicago, Ill.
W. O. Brown, Crane Co., Los Angeles, Calif.
Dr. Ronald Bulkley, Socony-Vacuum Laboratories, Paulsboro, N. J.
Francis P. Burns, Natural Gas Pipeline Co. of America, Amarillo, Tex.
George W. Butler, Southern Counties Gas Co., Hawthorne, Calif.
J. H. Cantlin, The Wilcolator Co., Elizabeth, N. J.
Charles H. Cass, The Hartford Gas Co., Hartford, Conn.
E. J. Chades, Southern California Gas Co., Los Angeles, Calif.
Marvin Chandler, Northern Illinois Gas Co., Aurora, Ill.
Fred A. Clarke, San Diego Gas & Electric Co., San Diego, Calif.
Arthur W. Clough, Mystic Valley Gas Co., Malden, Mass.
Lloyd R. Cobb, United Fuel Gas Co., Charleston, W. Va.
Albert L. Colby, The Peoples Gas Light & Coke Co., Chicago, Ill.
Albert B. Colfer, The Peoples Gas Light & Coke Co., Chicago, Ill.
Joseph M. Colon, Lancaster County Gas Div., U.G.I. Co., Lancaster, Pa.
William C. Conley, Norge Div., Borg-Warner Corp., Chicago, Ill.
John E. Damm, The Peoples Gas Light & Coke Co., Chicago, Ill.
Mrs. Pauline B. Damon, Wachusett Gas Co., Leominster, Mass.
Charles E. Davis, Long Island Lighting Co., Far Rockaway, N. Y.
Charles W. Davis, Peoples Water & Gas Co., North Miami Beach, Fla.
Robert W. Davis, Columbia Gas System Service Corp., Columbus, Ohio
Henry E. Dean, The Gas Service Co., Kansas City, Mo.
John B. Dee, Southern Counties Gas Co., Blythe, Calif.
Thomas E. Dorgan, The Peoples Gas Light & Coke Co., Chicago, Ill.
Warren L. Dunagan, Southern Counties Gas Co., Los Angeles, Calif.
John Dunlop, Canada Iron Foundries, Ltd., Montreal, Que., Can.
William P. Dunphy, Laclede Gas Co., St. Louis, Mo.
Charles S. Earnshaw, Pacific Gas & Electric Co., Oakland, Calif.

- Jesse J. Edwards, Norge Sales Corp., Borg-Warner Corp., Chicago, Ill.
Frank L. Ellings, Southern Counties Gas Co., Los Angeles, Calif.
Paul M. Elliott, Nagatuck Chemical, Naugatuck, Conn.
William I. Englehart, Moore Publishing Co., Inc., Cleveland, Ohio
John C. Finn, United States Pipe & Foundry Co., Boston, Mass.
Lawrence W. Freeman, Northern States Power Co., St. Paul, Minn.
Richard E. Fry, The Pacific Telephone & Telegraph Co., San Francisco, Calif.
Clarence C. Gardner, Pacific Gas & Electric Co., Hayward, Calif.
David L. Gardner, Laclede Gas Co., St. Louis, Mo.
Elmer L. Gates, Middle West Service Co., Chicago, Ill.
Daryl H. Giles, Mission Appliance Corp., Los Angeles, Calif.
Paul L. Gillespie, Chain Store Age, New York, N. Y.
S. M. Gilliland, Southern Counties Gas Co., Los Angeles, Calif.
Isaac Gingrich, Pacific Gas & Electric Co., Marysville, Calif.
Charles D. Goldrick, Boston Consolidated Gas Co., Boston, Mass.
William M. Graham, Public Service Electric & Gas Co., Hackensack, N. J.
Christabel Grauer, Southern California Gas Co., Los Angeles, Calif.
Thomas M. Gray, The Brooklyn Union Gas Co., Brooklyn, N. Y.
Francis M. Greenhalgh, Southern Counties Gas Co., Los Angeles, Calif.
M. D. Gustafson, Pacific Gas & Electric Co., San Francisco, Calif.
Walter H. Habericher, The Peoples Gas Light & Coke Co., Chicago, Ill.
Robert Haddock, Public Service Co. of Colorado, Denver, Colo.
Robert F. Hebel, Laclede Gas Co., St. Louis, Mo.
T. F. Heberly, Jr., York County Gas Co., York, Pa.
Willis C. Holder, The Peoples Gas Light & Coke Co., Chicago, Ill.
Rendall E. Holland, The Gas Service Co., Miami, Okla.
William Howells, The East Ohio Gas Co., Cleveland, Ohio
P. J. Huff, The Nebraska Natural Gas Co., Fremont, Nebr.
M. W. Hutchison, Southern Counties Gas Co., Santa Ana, Calif.
Gordon L. Ingram, Natural Gas Pipeline Co. of America, Chicago, Ill.
A. Ingvaldsen, Pacific Gas & Electric Co., Marysville, Calif.
Lewis A. Iversen, Pyrofax Gas Corp., New York, N. Y.

At Lab 25 years

ON APRIL 1, Mrs. Viola Moore completed 25 years of continuous service with the American Gas Association Laboratories in Cleveland. She is head of stenographic services.

Mrs. Moore joined the Laboratories during April, 1930, as a stenographer, five years after the Laboratory was founded.



1955

MAY

- 2-6 •A. G. A. Industrial Gas School, William Penn Hotel, Pittsburgh, Pa.
- 9-10 •A. G. A. Gas Supply, Transmission and Storage Conference, William Penn Hotel, Pittsburgh, Pa.
- 9-13 •National Restaurant Exposition, Navy Pier, Chicago, Ill. (A. G. A. will exhibit)
- 12-13 •Public Utilities Advertising Association, Sheraton Hotel, Chicago, Ill.
- 16-18 •Southern Gas Association, New Orleans, La.
- 17-19 •Pennsylvania Gas Association, Pocono Manor Inn, Pocono Manor, Pa.
- 23-24 •A. G. A. Residential Gas Section New York-New Jersey Regional Gas Sales Conference, Hotel Commodore, New York, N. Y.
- 23-25 •A. G. A. Chemical, Engineering and Manufactured Gas Production Conference, Hotel New Yorker, New York, N. Y.

JUNE

- 5-9 •Canadian Gas Association, Annual Meeting, Sheraton Brock Hotel, Niagara Falls, Ontario, Canada
- 6-8 •Institute of Appliance Manufacturers, Annual Convention, Netherland Plaza Hotel, Cincinnati, Ohio
- 9-10 •Natural Gas and Petroleum Association of Canada, Annual Meeting, Royal Connaught Hotel, Hamilton, Ontario, Canada
- 13-16 •Edison Electric Institute, Annual Meeting, Hotel Statler, Los Angeles, Calif.
- 26-July 1 •American Society for Testing Materials, Chalfonte-Haddon Hall, Atlantic City, N. J.
- 27-28 •Michigan Gas Association, Grand Hotel, Mackinac Island, Mich.
- 28-July 1 •American Home Economics Association, Minneapolis, Minn.

JULY

- 11-15 •National Housewares & Home Appliance Exhibits, Convention Hall, Atlantic City, N. J.

AUGUST

- 1-3 •American Trade Association Executives, Grand Hotel, Mackinac Island, Mich.

SEPTEMBER

- 9 •New Jersey Gas Association, Hotel Monmouth, Spring Lake, N. J.
- 11-13 •Independent Natural Gas Association of America, Jasper National Park, Canada
- 14-15 •Seventh Annual A.G.A. Accident Prevention Conference, Little Rock, Ark.
- 25-30 •International Gas Union Sixth Conference, Hotel New Yorker, New York

Donald A. Jackman, Southern Counties Gas Co., Santa Maria, Calif.
 Roland H. Jacobs, Lynn Gas & Electric Co., West Lynn, Mass.
 Carroll D. James, Public Service Electric & Gas Co., Newark, N. J.
 Thomas S. Johansen, Shell Oil Co., San Francisco, Calif.
 Oscar E. Johnson, Southern Counties Gas Co., Los Angeles, Calif.
 William O. Johnson, Pacific Gas & Electric Co., Richmond, Calif.
 Laurie P. Jones, United Gas Corp., Houston, Tex.
 Mortimer H. Jordan, Southern Natural Gas Co., Birmingham, Ala.
 Carl Kalmus, New York & Richmond Gas Co., Staten Island, N. Y.
 John G. Keane, Kings County Lighting Co., Brooklyn, N. Y.
 Charles H. Keplinger, Keplinger & Wanenmacher, Tulsa, Okla.
 Russell E. Kiem, Southern California Gas Co., Los Angeles, Calif.
 James N. Kirtley, Southern Counties Gas Co., Los Angeles, Calif.
 K. Russell Knoblauch, Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.
 Ralph F. Koebelman, George D. Roper Corp., Rockford, Ill.
 Edward J. LaCroix, Michigan Wisconsin Pipe Line Co., Detroit, Mich.
 George P. Langton, Mystic Valley Gas Co., Malden, Mass.
 Melvin T. Larson, The Peoples Gas Light & Coke Co., Chicago, Ill.
 Andrew J. Leib, Lancaster County Gas Div., U.G.I. Co., Lancaster, Pa.
 Alec C. Little, Michigan Consolidated Gas Co., Detroit, Mich.
 Lenard W. Little, United Gas Corp., Houston, Tex.
 Donald S. Lord, Public Service Electric & Gas Co., Newark, N. J.
 Arthur E. Love, New York & Richmond Gas Co., Staten Island, N. Y.
 Edgar E. Lungren, Northern Illinois Gas Co., Aurora, Ill.
 John D. Malone, The Peoples Gas Light & Coke Co., Chicago, Ill.
 Peter S. Mansfield, Mystic Valley Gas Co., Malden, Mass.
 David M. Mason, Institute of Gas Technology, Chicago, Ill.
 J. C. McCarthy, The Consumers' Gas Co. of Toronto, Toronto, Ont., Can.
 William J. McCormick, Philadelphia Electric Co., Pennel, Pa.
 John S. McElwain, The East Ohio Gas Co., Cleveland, Ohio
 Mrs. Ora R. McLeod, United Gas Corp., Houston, Tex.
 David S. McManus, United Gas Corp., Beaumont, Tex.
 Joseph J. McNerney, The Peoples Gas Light & Coke Co., Chicago, Ill.
 Richard A. Menzel, Milwaukee Gas Light Co., Milwaukee, Wis.
 Byron L. Miller, Metropolitan Utilities District, Omaha, Neb.
 Harriet C. Monahan, The Peoples Gas Light & Coke Co., Chicago, Ill.
 Charles Motyka, The Peoples Gas Light & Coke Co., Chicago, Ill.
 Albert P. Mueller, Milwaukee Solvay Coke Co., Milwaukee, Wis.

R. A. Muldoon, Whirlpool Corp., St. Joseph, Mich.
 Jack T. Mulligan, The East Ohio Gas Co., Cleveland, Ohio
 C. Robert Munderback, Central Hudson Gas & Electric Corp., Poughkeepsie, N. Y.
 Francis A. Murray, Northern Illinois Gas Co., Joliet, Ill.
 Earle W. Neff, The Harrisburg Gas Div., U.G.I., Harrisburg, Pa.
 Wayne E. Nelson, Southern Counties Gas Co., Los Angeles, Calif.
 Maurice S. Newman, Cresap, McCormick & Paget, New York, N. Y.
 William J. Nickel, Moore Publishing Co., New York, N. Y.
 H. R. Nielsen, Servel, Inc., Evansville, Ind.
 W. H. Noble, Republic Steel Corp., Los Angeles, Calif.
 Aloysius G. Nona, The Peoples Gas Light & Coke Co., Chicago, Ill.
 John C. O'Keefe, Public Service Electric & Gas Co., Newark, N. J.
 Edward J. O'Loughlin, New York & Richmond Gas Co., Staten Island, N. Y.
 Patrick B. O'Rourke, Portland Gas & Coke Co., Portland, Ore.
 Robert C. Orriny, Southern Counties Gas Co., Los Angeles, Calif.
 William M. Parker, Canadian Western Natural Gas Co. Ltd., Calgary, Alta., Can.
 Luke V. Patrick, Transcontinental Gas Pipe Line Corp., Houston, Tex.
 Walter K. Paul, Northern Indiana Public Service Co., Hammond, Ind.
 C. D. Pendergrast, Northern Illinois Gas Co., Chicago, Ill.
 Robert M. Poe, E. Holley Poe Associates, Stamford, Conn.
 Owen J. Pritchard, Milwaukee Solvay Coke Co., Milwaukee, Wis.
 Eric K. Raab, Pacific Gas & Electric Co., Avon, Calif.
 Bernhard E. Rabe, The Peoples Gas Light & Coke Co., Chicago, Ill.
 A. C. Reiners, Standard Oil Co. (N. J.), New York, N. Y.
 Bert W. Reynolds, Gas Appliance Society of Calif., San Francisco, Calif.
 Paul L. Ristroph, City of New Orleans, New Orleans, La.
 Robert R. Robb, Southern Counties Gas Co., Ventura, Calif.
 Mary Rodgers, Southern Counties Gas Co., Los Angeles, Calif.
 Raymond L. Rodgers, Southern Counties Gas Co., Los Angeles, Calif.
 Leon A. Rushmore, Jr., Long Island Lighting Co., Mineola, N. Y.
 Dewey J. Sabin, Sohio Petroleum Co., Oklahoma City, Okla.
 Arthur H. Scheffer, Chambers, Indianapolis, Ind.
 Warren E. Schickling, Southern Counties Gas Co., Los Angeles, Calif.
 Carl A. Schwartz, The Gas Service Co., Kansas City, Mo.
 William C. Scranage, Hope Natural Gas Co., Clarksburg, W. Va.
 Arthur L. Seeley, Lancaster County Gas Div., U.G.I. Co., Lancaster, Pa.
 John Sellors, Jr., Bryant Industrial Products Corp., Cleveland, Ohio
 Wesley T. Shatzer, Southern California Gas Co., Los Angeles, Calif.
 Carl C. Simmons, Consolidated Gas Electric

(Continued on next page)

Personnel service

SERVICES OFFERED

Industrial Sales Engineer—with twenty years' experience in applications of gas and oil to various industrial and commercial processes. Executive and organization ability. Qualified heating engineer. Midwest area preferred. Will consider other territory. Presently available. 1801.

Student Engineer—holder of BS from Punjab University and at present studying gas distribution and supply at Westminster Technical College in London. Wishes to gain practical experience in U.S. and then plans to return to Pakistan eventually. (24) 1802.

Experienced LP/or Utility Gas Operator—desiring position in expanding area where seasoned experience can be used to mutual benefit. 1803.

Distribution Engineer—capable of planning and supervising the installation of gas mains. Competent and experienced in handling of maintenance of gas mains. Have knowledge of complete office procedure. Familiar with operating methods, budgets, scheduling. 1804.

Administrative Assistant—registered professional engineer with nine years' diversified experience assisting management of a natural gas holding company with its operational planning, regulatory hearings, rate investigations, and economic feasibility studies desires similar position with progressive gas or combination company. Prefer Eastern location. 1805.

Executive—unusually successful experience and broad background in all segments of company operations both as an operator and consultant. 1806.

Distribution Engineer—experienced in design and operation of natural gas distribution systems desires position with opportunity for advancement. Graduate degree in business administration. Eight years' engineering experience with gas utility. 1807.

Management Engineer—eight years' experience with medium size midwest gas utility in all phases of operations and engineering, both technical and administrative, during manufactured gas, changeover, and natural gas periods. Engineering degree and registered professional engineer. Desires greater responsibility and opportunity in expanding company. 1808.

Market Analyst-Economist—available for gas utility or gas transmission company. Columbia

University Ph.D. (Economics) degree. Participated in Executive Development Program of major gas utility company; former marketing management consultant. Familiar with statistical techniques, public regulation, and sales promotion. Married. (34) Salary requirement: \$700 monthly. 1809.

Engineer—graduate, with extensive experience in design, development and production of gas appliances, much of it at a supervisory level, is interested in a new connection. Resume available. 1810.

POSITIONS OPEN

Heating, Ventilating, and Fuel Economy Engineer—qualified to evaluate commercial size heating and ventilating equipment and installations and make cost analyses thereof. Beginning salary approximately \$3,900. 0760.

Business Manager—with medium-sized Mid-Western utility, serving approximately 140,000 gas and water meters. Must be capable of coordinating and supervising General Accounting, Auditing, Consumer's Accounting and Purchasing departments. Will be responsible for establishing accounting controls, budgets, procedures, etc. in connection with entire operation of company. Degree in Accounting necessary. Must be in good physical condition. 0761.

Distribution Engineers—a prominent midwestern utility has immediate need for Gas Distribution Engineers. Must be a college graduate with experience in distribution engineering and operations. Your reply should include age, experience and salary requirements. All replies will be held confidential. 0762.

Gas Meter Engineer—experienced in operation, testing and maintenance of displacement and orifice meters. Opening is with sound, fast growing, midwestern utility serving 140,000 customers. Good opportunity for advancement. Give details of experience, education and personal data. 0763.

Salesmen—experienced in sales and service, gas and air conditioning equipment. Metropolitan New York area. Must have own car. Send in resume. 0764.

Gas Plant Engineer—short term overseas assignment on staff of American consulting firm to survey and report on proposed improvements to two municipal gas plants. 0765.

Accounting Specialist—to assist controller of large natural gas company in West. C.P.A., ac-

counting degree and 10 years' experience in the gas business preferred. Age 30-40. Must have analytical and research ability. Work involves special problems, i.e., budgets, reports, rate cases, tax matters, etc. Excellent opportunity for advancement in expanding company. Salary open. Liberal employee benefit plan. Submit details about self, past experience and approximate salary expected. 0766.

Manufacturers Representatives—to handle complete line of furnaces. This is one of the leading, old established manufacturers in the business. Preferred and protected territories open. Only qualified aggressive sales representatives wanted. Give full references and experience in reply. 0767.

Industrial Sales Engineer—with New York sales representative, industrial gas equipment, age 25-32. Experience with utility or gas equipment manufacturer preferable but not necessary. Submit resume. 0768.

Gas Engineer—Connecticut utility requires young gas engineer capable of taking over as assistant superintendent of department handling production, distribution, meters and customers service. Prefer under 35 with technical background and some experience in one or more of above operations. For properly qualified man this is a permanent, pleasant and well-paid position. Reply stating age, experience, education and personal particulars. 0769.

Natural Gas Engineer—for research on productivity of natural gas wells in the Mid-Atlantic area. Work involves the basic theory of fluid flow. Experience required in well testing and gas measurement. Reply giving references and full details as to education, professional experience, and salary expected. 0770.

Manager—for gas utility, recently converted to straight natural gas, located in Middle-Atlantic state. Approximately 6,000 meters. One of a group of jointly operated properties. Knowledge of distribution system operation and construction, sales, industrial gas utilization, and office procedure desirable. Advise full particulars about self and past experience. 0771.

Sales Engineer—leading Midwestern valve manufacturer is searching for sales engineer to handle sales to gas appliance manufacturers. Knowledge of gas advantageous, however, not absolutely necessary. Opportunity for advancement assured for right man. Please state qualifications and salary expected. 0772.

Light & Power Co., Baltimore, Md.
Stanley F. Skafte, Utility Appliance Corp., Los Angeles, Calif.
A. L. Smith, The Brooklyn Union Gas Co., Brooklyn, N. Y.
Gerald G. Spangler, Lancaster County Gas Div., U.G.I. Co., Lancaster, Pa.
William J. Speir, Waterworks Equipment Co., Pocatello, Id.
Charles H. Stevens, Empire Gas & Fuel Co. Ltd., Wellsville, N. Y.
Arthur W. Stewart, Columbia Gas System Service Corp., New York, N. Y.
H. Russell Stiles, Mystic Valley Gas Co., Malden, Mass.
Frank C. Sullivan, Southern California Gas Co., Los Angeles, Calif.
Albert Taylor, Amerada Petroleum Corp., Tulsa, Okla.
Robert F. Teepe, The Peoples Gas Light & Coke Co., Chicago, Ill.
Francis X. Tennant, The Brooklyn Union Gas Co., Brooklyn, N. Y.
Albert G. Thompson, New Jersey Natural

Gas Co., Asbury Park, N. J.
Arthur B. Thomson, Jr., New York & Richmond Gas Co., Staten Island, N. Y.
E. M. Toussaint, Minneapolis-Honeywell Regulator Co., Appln. Controls Div., Los Angeles, Calif.
John A. Tower, Natural Gas Pipeline Co. of America, Chicago, Ill.
W. T. Vance, International Business Machines Corp., New York, N. Y.
Frank G. Van Scoy, Hope Natural Gas Co., Clarksburg, W. Va.
Frank J. Waindle, A. O. Smith Corp., Chicago, Ill.
M. P. Walker, Southern Counties Gas Co., Los Angeles, Calif.
Alan C. Ward, Clarke H. Joy Co., Bay Village, Ohio
Norman F. Wasson, Southern Counties Gas Co., Los Angeles, Calif.
Loren R. Wendt, Southern Counties Gas Co., Pomona, Calif.
Kenneth L. Wharff, Michigan Wisconsin Pipe Line Co., Detroit, Mich.

Darwin E. Whipkey, New York State Natural Gas Corp., Pittsburgh, Pa.
Fred K. Whiteside, Selas Corp. of America, Philadelphia, Pa.
J. Anson Wilhelm, Gilbert Associates, Inc., Reading, Pa.
Paul Williams, United Gas Pipe Line Co., Shreveport, La.
John V. Wiman, Public Service Electric & Gas Co., Newark, N. J.
Evelyn M. S. Winkes, The East Ohio Gas Co., Cleveland, Ohio
Robert C. Witter, Jr., Southern Counties Gas Co., Los Angeles, Calif.
Alden F. Wooster, Michigan Wisconsin Pipe Line Co., Detroit, Mich.
Andrew F. Wray, Niagara Mohawk Power Corp., Syracuse, N. Y.
Charles H. Young, Elizabethtown Consolidated Gas Co., Elizabeth, N. J.
D. G. Young, Southern Counties Gas Co., Pomona, Calif.
William D. Ziegler, Lancaster County Gas Div., U.G.I. Co., Lancaster, Pa.

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